DOCUMENT RESUME

ED 276 455 IR 051 706

AUTHOR Bello, Susan E.
TITLE Cooperative Preservation Efforts of Academic Libraries. Occasional Papers Number 174.
INSTITUTION Illinois Univ., Urbana. Graduate School of Library and Information Science.
PUB DATE Oct 86
NOTE 54p.
AVAILABLE FROM Occasional Papers, Graduate School of Library and Information Science, Publications Office, University of Illinois at Urbana-Champaign, 249 Armory Building, 505 E. Armory Street, Champaign, IL 61820 ($3.00 plus $.50 postage, all orders must be prepaid; subscriptions for 1986, $13.00).
PUB TYPE Information Analyses (070) -- Viewpoints (120)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Academic Libraries; Books; *Cooperative Programs; Financial Needs; Higher Education; *Library Materials; Library Planning; Long Range Planning; *National Programs; *Preservation; Research Libraries
IDENTIFIERS *Association of Research Libraries; Council on Library Resources; *Research Libraries Group

ABSTRACT

This paper analyzes the major national plans for preservation programs in the United States from 1954 to 1985 and shows the extent to which aspects of these plans have been achieved by academic libraries. Plans presented to and commissioned by the Association of Research Libraries (ARL) between 1954 and 1972 are examined; the formation of the Research Libraries Group (RLG) is discussed and major documents related to its purpose and its preservation program are analyzed; and the evolution of a national preservation program in the 1980s is traced by a review of national conferences concerning preservation as well as the major reports and activities of ARL and the Council on Library Resources (CLR). It is concluded that, because of the size of the universe of materials requiring treatment, the need to foster the idea of a "national collection," and the need to develop new managerial and financial capacities, preservation presents major difficulties for academic libraries in the years ahead. References are provided, and an index facilitates location of material. (Author/KM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

University of Illinois
Graduate School of Library and Information Science

OCCASIONAL PAPERS

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ISSN 0276 1769

Number 174
October 1986

ED276455

Cooperative Preservation Efforts of Academic Libraries

by

Susan E. Bello

IR051702

BEST COPY AVAILABLE

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

L. Hoffman

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

© 1986 The Board of Trustees of The University of Illinois

Contents

Abstract 3
Introduction 3
I. Early Proposals for National Plans 1954-1972 5
II. The Preservation Program of the Research Libraries Group..... 14
III. The Evolution of a National Preservation Program in the 1980s .22
Conclusion 37
Acknowledgment 42
References 42
Vita 41
Index 49

ABSTRACT

This paper analyzes the major national plans for preservation programs in the United States from 1954 to 1985 and shows the extent to which aspects of these plans have been achieved by academic libraries. Part one of this *Occasional Paper* examines plans presented to and commissioned by the Association of Research Libraries (ARL) between 1954 and 1972. The second part discusses the formation of the Research Libraries Group (RLG) and analyzes major documents related to its purpose and to its preservation program. The evolution of a national preservation program in the 1980s is traced in the third part by a review of national conferences concerning preservation and of the major reports and activities of ARL and of the Council on Library Resources (CLR).

Because of the size of the universe of materials requiring treatments, the need to foster the idea of a "national collection," and the need to develop new managerial and financial capacities, preservation presents major difficulties for academic libraries in the years ahead.

INTRODUCTION

The history of preservation efforts in American libraries might be told by tracing three important developments in librarianship during the past 30 years: (1) the emergence of a new discipline—preservation administration; (2) the application of rigorous analytical methods of the social sciences to the management of library collections and operations; and (3) the development of viable regional and national consortia of libraries. Early proposals for a national plan for the preservation of library materials in the 1950s remained conceptions rather than working documents because these three developments had not yet occurred. There existed neither a body of knowledge about preservation of library materials nor trained personnel nor organizational structures for the support of cooperative ventures that could test the proposals and bring them to life. Although most libraries had employed some staff in rudimentary procedures of binding—replacing worn-out volumes and maintaining stacks—none before the 1970s gave sustained professional attention to managing their collections vis-à-vis the goal of preservation.[1]

Like the related contemporary movements of the preservation of historic buildings and artifacts and the conservation of natural resources, the preservation of library materials is a complex problem that offers no prospect of ultimate solution, requiring instead eternal vigilance. Compared with these other movements, however, the preservation of written

records has received little public attention. Media coverage of this movement outside the professional literature has been sparing.[2] Many users of academic libraries are unaware that there is a problem and that their behavior in libraries and their handling of library materials affects the life span of the materials.

Many users lack knowledge about the physical composition of books and about the kind of treatment and storage conditions conducive to their prolonged life. The acidic content of paper and binding materials manufactured in modern times renders books self-destructive; this deterioration is accelerated by heat, light, insufficient or excessive humidity, microbial and insect attack, and use by human beings. Optimal storage conditions therefore would mean a controlled climate with regard to light, temperature, and humidity and a closed stack arrangement in which the enemies of books are excluded. Historically, academic libraries have provided such conditions only for their rare book and manuscript collections and for their computer equipment.

Even if libraries could afford to provide these conditions for the bulk of their collections, the question of service to readers would have to be addressed. Direct access to print and nonprint materials is a primary service expected by users and endorsed by modern philosophies of librarianship. Richard M. Dougherty has pointed out that academic librarians must resolve the conflict between the objectives of access and preservation. He predicts that access will continue to have priority because "users will not be willing to forgo their accustomed conveniences" such as photocopying and borrowing materials for use outside the library building.[3] On the other hand, damage to library materials from reasonable use may be "the acceptable result of successful library functioning."[4] Ian R.M. Mowat has argued that for academic libraries "it is wasteful, economically and educationally, to give priority to preservation over use."[5] He suggests that only those libraries with a designated role in a national preservation program should place preservation before access.

It follows from such reasoning that academic libraries can without hesitation continue to promote use over preservation only if a national preservation program exists and if libraries with preservation responsibilities execute this function. The enormity of the bibliographic universe immediately signals the need for a cooperative effort because not even the largest of national libraries has collected or can preserve a copy of every potentially endangered title. The magnitude of the problem caused early planners in the United States to envision a monolithic campaign conducted by a federally supported national library agency. After concerned observers in major research libraries realized that such a campaign had not

been and would not be mounted, they suggested modest, decentralized approaches to the problem. A leader in the preservation field has acknowledged recently that the distributed approach "seems to work best in a large, diverse and decentralized country such as ours."[6]

Although there is still no comprehensive national preservation plan in the 1980s, important projects have been mounted by individual libraries and by groups of libraries across the nation. Made possible by the important developments in librarianship mentioned earlier, these projects represent a substantial commitment to preservation, and it appears that a national program is evolving. This paper will present a history of plans for cooperative preservation efforts involving academic libraries in three parts: (1) early proposals for national plans 1954-1972, (2) the preservation program of the Research Libraries Group, and (3) the evolution of a national preservation program in the 1980s.

I. EARLY PROPOSALS FOR NATIONAL PLANS 1954-1972

In his introduction to the January 1956 issue of *Library Trends* devoted to "Conservation of Library Materials," Maurice F. Tauber states that "it would be unfair to describe librarians as a group which has been delinquent" in the stewardship of programs in conservation and preservation.[7] He asserts that most research librarians are aware of the need for adequate binding programs, of the need for special treatment of nonbook materials, and of the possibility of applying microreproduction and other photographic media to solving the preservation problem. Reflecting the state of the art at that time, the articles in that issue of *Library Trends* deal with such topics as lamination, discarding practices, commercial binderies, and stack maintenance.

Tauber suggests that "the American Library Association and other library organizations might well work cooperatively in supporting studies of the problems on a national basis."[8] He relates that the Association of the Research Libraries had recently been working with the Council of National Library Associations to address not only the problem of natural deterioration but also the protection of library resources in the event of military attack. Concern about the accessibility and destruction of materials in European libraries during World War II stimulated research librarians in the United States to consider a plan for cooperative acquisition of foreign materials. Although there was some movement of rarities to safe places during World War II, no plans were made for safeguarding general research collections in American libraries until the cold war years. Thus the 1942 proposal for the Farmington Plan, which began operation in

1948, included no mention of preservation responsibilities by the libraries building comprehensive collections in specific subject areas.[9]

In 1954 the ARL Committee on National Needs considered several plans for a national preservation program. A document prepared by Scott Adams set forth the characteristics necessary in a national plan and suggested that "shadow" collections should be developed that would store in secure locations the information essential to defense and to the rebuilding of civilization. Among the characteristics enumerated, of special note are the recommendations that the national plan "should be based on coordinated long-term development, rather than on emergency protection measures"; that it "should pay dividends of current service while providing an ultimate hedge against disaster"; that "its costs should be distributed among those who stand to profit by it"; and that its purpose "should be the preservation not of individual libraries, but of the materials of scholarship, of science, of technology."[10] During this same year the ARL Committee considered other proposals for "coordination of programs of reproduction of materials" and for "development of a network of library services between libraries located in non-strategic centers."[11] It is significant that these proposals placed primary responsibility for protection of unique and valuable materials upon individual institutions rather than upon a regional or national agency. Although the ARL did not adopt a national preservation plan at this time, the seeds of later plans are discernible in these early proposals.

It is clear from Tauber's remarks and from the topics addressed in the articles in the January 1956 issue of *Library Trends* that librarians were concerned about the deterioration of library materials from use and from lack of binding or improper binding. A second stage of cooperative preservation efforts involving academic libraries began when alarming results of new research into the causes of the deterioration of paper prompted librarians to organize in order to address the problem. Although observations of the instability of paper manufactured from wood pulp had been reported since the early nineteenth century, it was not until William J. Barrow's experiments were made known in 1959 that many people concerned with book publishing were convinced of the seriousness of the potential loss of records printed on modern paper.[12] Barrow, a conservator and expert on the problems of aging paper, performed a series of studies on the physical strength of paper from 1957 to 1959 with funding from the Council on Library Resources. His careful tests on a sample of 500 nonfiction books published between 1800 and 1949 suggested that "only three percent of the volumes studied had paper which could be expected to last more than fifty years."[13] Thus most books printed in the first half of the twentieth century

would deteriorate before the end of the century. After a discussion of Barrow's findings at a meeting of the ARL in June 1960, a standing Committee on the Preservation of Research Library Materials was appointed.

The new ARL committee identified its charge as the rescue of the great bulk of research collections rather than the restoration of smaller, special collections of rare or valuable books and manuscripts. The committee assumed that the remedy would be found in microtechnology but agreed that chemical treatment of books should be studied as an alternative. The first step in establishing a framework for national planning seemed to be a determination of the magnitude of the problem. The committee's first published report in 1962 concerned a study undertaken by the Research Triangle Institute and funded by the CLR. The study showed that nonserial titles listed in the National Union Catalog in 1961 contained some 3 billion pages of which nearly 60% were in volumes published since 1869 and therefore likely to have been printed on acidic paper.[14]

The committee's second project, also funded by CLR, was a comprehensive study of the preservation problem undertaken by Gordon Williams, director of the Center for Research Libraries. Williams's final report was completed in 1964 and adopted by the ARL Preservation Committee in January 1965. The report recommended that a national program be implemented for the preservation of one original copy of all significant written records in research libraries. In order that the original example of each work could be preserved as long as possible, microfilm copies of photocopies would be supplied for ordinary use of the work.[15]

Williams recommended that a collection of preservation items should be maintained by a federally supported central library agency with the following responsibilities: (1) preservation of deteriorating records deposited by libraries; (2) coordination of its own preservation program with local programs of individual libraries to assure the preservation of all significant records; (3) provision of microform or photographic copies of deteriorating materials to all libraries; (4) loan of microform positives to libraries without charge; (5) preservation of all microform masters made at its expense or deposited by others; and (6) coordination of the preservation of microform masters made by other agencies. In this program, bibliographic control would be provided through the National Union Catalog by means of compact lists of preserved items with citations to the original entries in the National Union Catalog.[16]

Unlike the proposals forwarded in 1954 that specified that costs would be distributed among those who stood to profit from the arrangement. Wil-

liams's plan placed the costs upon the federal government. The 1964 plan hinged upon the willing deposit of original copies into the central agency by research libraries, but it did not suggest a means by which libraries would be indemnified. The report allowed for research libraries retaining original best copies of works to be preserved rather than depositing them at the central library agency. Thinking that storage conditions would be best at the central agency, Williams provided "an inducement to libraries to deposit as early in the book's life as possible" by permitting the depositing library to buy a positive microform of the book for half the cost of the print.[17]

In June 1965 the ARL recommended that the Library of Congress (LC) implement a program based on the Williams report. At a meeting among senior staff of LC and the ARL Preservation Committee in December 1965, the librarian of Congress formally accepted this responsibility. The next step was a Pilot Preservation Project, sponsored by ARL and funded by the CLR. This project aimed at assessing the administrative and technical problems involved in a national preservation program modeled upon Williams's plan.[18]

Conducted at the Library of Congress in 1967 and 1968, the pilot project compared copies of the same volumes in the brittle book collection—i.e., books with paper that breaks after several folds—at LC with copies of the same volumes in other libraries. The study concluded that the identification of material which should belong in a national preservation collection was administratively feasible. Although no attempt was made to establish a central register of best copies, there appeared to be "no particular problems" with its production.[19] The study did not investigate the willingness of research libraries to contribute to a national preservation collection or to accept responsibility for preserving those books in their own collections that were designated as national preservation copies. Nor did the study address the need for development of indemnification procedures.

With regard to other issues, the report on the Pilot Preservation Project concluded that more research needed to be conducted on the development of a more efficient and economical method of deacidification and on the determination of optimal storage conditions. The Library of Congress followed through on these research problems rather than on organizational efforts necessary to involve libraries in a national preservation program. In 1969 the Council on Library Resources provided funds to establish a conservation laboratory at LC, and a restoration officer was appointed.[20] In subsequent years LC continued to emphasize research and focused on the preservation of its own collections rather than on develop-

ing a national preservation collection as specified in Gordon Williams's 1964 report.

The latter goal was taken up by the ARL Preservation Committee which launched a study in the spring of 1970 with funding from the U.S. Office of Education, "the first significant federal funding for library preservation."[21] The final report of the study was issued in 1972, entitled *Preparation of Detailed Specifications for a National System for the Preservation of Library Materials*. Director of Libraries at Columbia University from 1970 to 1977, Warren J. Haas chaired the ARL Preservation Committee and wrote the report. In the introduction Haas admits that "this is not a research report, but rather, one of synthesis."[22] Accordingly, the report clarifies the nature of the preservation problem, assesses progress that has been made in recent years, and suggest four types of action: (1) research; (2) education and training; (3) preservation and conservation efforts in individual libraries; and (4) collective action. Haas explains that the new study was undertaken with the assumption that it would provide operational details necessary for implementation of the 1964 report. The objectives of that report are still valid, Haas states, but the proposals for action by a federally supported central agency have not been furthered in any meaningful way. Consequently, Haas calls for organizational means of addressing the preservation problem that are quite different from those conceived in the Williams report.

After affirming the need for preservation and conservation efforts in individual libraries and specifying actions that they should take, Haas warns that "the efforts of libraries acting alone cannot in the long run fully meet the intellectual and social threats implicit in the face of massive collection deterioration."[23] Two things were necessary for effective collective action: an organizational structure and specific programs for the resolution of the preservation problem. Haas discusses each of these at length.

Plans for an organizational structure should take into account two key considerations: (1) the small number of research libraries immediately concerned with preservation, and (2) the function of disseminating the information preserved. Haas reports that massive collection deterioration is a readily apparent problem in relatively few research libraries in the United States. An informal survey of participants at the January 1971 ARL meeting confirmed the hypothesis that it was the oldest and largest libraries—mostly in urban locations—that perceived a serious need for preservation programs. The collections of these 15 to 20 libraries were the most endangered. Many scholars depended on these libraries as ultimate national resources; thus, there was reason for wide concern. "The fate of these collections is a predictor of what will happen in time to others."[24]

The process of preservation is related to information dissemination, since the products of much preservation work are microforms and reprints. The 1964 ARL report's view of dissemination as a by-product of preservation was unappealing to many academic librarians. Edwin E. Williams, associate university librarian at Harvard University and a member of the ARL Preservation Committee, had suggested that emphasizing improved and continued access to library materials would call for rewriting the 1964 proposal in a way that would modify the machinery suggested. Supporting this idea, Haas settles the conflict between preservation and dissemination by observing that "the two must be seen as inseparable parts of the fundamental library obligation to create and maintain resources for research."[25]

Having explicated these key considerations, Haas proposes that a preservation consortium of the most concerned libraries be formed for a trial period of one to two years. Operating independently or with sponsorship by the Association of Research Libraries or the Center for Research Libraries, the consortium would identify and carry out specific preservation projects. Such a consortium would test the validity of the proposition that collective action was essential to further progress toward a national preservation program. It would also test the viability of a new operating structure under which research libraries could act collectively to achieve desired goals in many areas: a permanent structure would not be constituted until a model had proven successful. Progress by the consortium in formulating common preservation procedures and uniform performance standards would precede the installation of a continuing program of action. Such progress would also pave the way for "the creation of a national library corporation as a base for collective action in the full range of activities in the interrelated areas of preservation and resource development."[26]

In presenting the case for a corporation of research libraries, Haas identifies three functions central to all research library operations: (1) resource development, (2) identification and location of items or information, and (3) service to users. The third function must be performed by each individual library in response to the needs of its clientele. With regard to the second function of producing a comprehensive bibliographic record for information in all forms, Haas states that most people think that the responsibility should be borne by the three national libraries with the Library of Congress playing the central role. On the other hand, the national libraries cannot be expected to assume the obligation of "the rational development of research resources on a truly comprehensive scale and on a nationally and even internationally acceptable pattern that promotes access and equitable distribution." This responsibility must be shared by research libraries which lack, however, "a capacity for collective

action that is suitable to the dimension of the job to be done."[27] Haas's plan continues with a description of the characteristics of a national library corporation and of the ways in which member libraries should participate in it.

Thus, in Haas's view, cooperative preservation efforts would be part of research libraries' collective mission of resource development. He recommends that members of the preservation consortium initiate the following activities: (1) creation of prototype preservation collections in individual libraries, (2) formulation of preservation priorities, and (3) preparation of plans for administering a national collection of negative microfilm.[28]

This last activity may be contrasted with the national preservation collection of best copies of original items as proposed in the 1964 ARL report. Haas assents to the principle of segregating and preserving under optimal conditions the best copies of endangered titles, but he states that it is "unrealistic to assume that a new and separate national collection devoted exclusively to preservation purposes will be established in the near future."[29] Instead of a national preservation collection administered by a federal agency, Haas calls for the creation of a coordinated system of collections in a national plan, each with a particular orientation by subject or format. Both the purpose of preservation and the function of resource development would be served by such a network. Haas suggests that the consortium libraries undertake a cooperative microfilming project in such a way that the research library community would retain ownership and control of master negatives.

With regard to the creation of prototype preservation collections in individual libraries, Haas proposes that the consortium libraries formulate standards governing storage, use, bibliographic control, and item identification. Haas retains from the 1964 report the idea of setting aside the best copy of a particular work, designating it as the "national resource copy," and registering it in the National Union Catalog. In Haas's plan, however, the best copy would remain in the holding library which would store the item under appropriate conditions and permit use according to agreed-upon regulations.[30]

Haas's report differs from the 1964 report on the issue of selective preservation. Whereas the earlier plan called for preservation of every significant written record in research libraries, the 1972 plan does not aspire to preserve everything, focusing instead on manageable, discrete subject areas. Haas suggests, for example, a possible target of American imprints 1870-1900. Such a project might be undertaken in a library designated a

national resource collection for nineteenth century American literature, and two or three other libraries might also be designated resource collections for the same subject in order to extend coverage and promote coordination of preservation efforts. In this way real progress might be made by adding preservation goals to the prospect of national resource collections.[31]

The most striking difference between the plans of Williams and Haas is the latter's recognition that major libraries with distinctive collections would not "be easily moved to withdraw copies of volumes in excellent condition for inclusion in a preservation collection, nor are the scholars who depend on such collections likely to support any such move."[32] Haas realized that research libraries would want to retain both their autonomy and their collections; in his plan the national library agencies were relied upon only for the continued production of a comprehensive bibliographic record. Haas points out, however, that research libraries cannot afford to operate autonomously with regard both to preservation of retrospective materials and to acquisition of current and future materials. Whereas Williams had suggested a solution featuring a centralized federal agency coordinating preservation efforts, Haas proposes a decentralized league of libraries, a consortium.

Since Haas offers no definition or explanation of a "consortium," one can assume that his audience in the Association of Research Libraries and the Office of Education were familiar with the term. Indeed they were, because the establishment of consortia among libraries of all types was the most striking phenomenon in librarianship during the late 1960s. A study commissioned by the Office of Education found that 99 consortia involving academic libraries were founded during the period 1966-1971, compared with a total of ten during the 30-year period 1931-1960 and 16 during the period 1961-1965.[33] Automation, the desire to improve services, an increase in cooperative ventures among institutions of higher education, and federal support for library cooperation were major factors in this rapid rate of growth.

Although interlibrary cooperation for purposes of cataloging and lending books had been practiced since the late nineteenth century, it was not until the mid-1940s that "cooperation on a national scale came to be recognized as essential to meet greatly increased responsibilities; 30 years later cooperation was reaching into virtually every aspect of university library operation."[34] Arthur T. Hamlin has estimated that by 1970 most large university libraries were involved in at least six various types of consortia.[35]

It is important to differentiate between the simple, informal agreements for interlibrary loan and the complex, formal arrangements for consortia or networks which "call for members to share system planning and development resources, as well as operating responsibilities and functions."[36] According to this definition, 125 consortia involving academic libraries were in existence by 1972 including the New England Library Information Network (NELINET) founded in 1966; the New York Metropolitan Reference and Research Library Network (METRO) founded in 1969; and the Ohio College Library Center (OCLC) founded in 1967. The stated purposes of these major consortia included: "increasing the accessibility of existing collections"; providing for "the cooperative acquisition, joint ownership and joint use of specialized and less frequently used library materials"; and operating computerized systems to assist members "in providing a faster, more efficient search and retrieval system for library books and journals, and research, development and implementation of such systems."[37]

Although a number of consortia sponsored microfilming projects, none stated preservation of large collections as an objective. The majority of consortia were regional in nature and were composed of college libraries. In contrast to Hamlin's statement cited earlier, I have observed that the *largest* university libraries stood outside consortia in 1972. It is true that the New York Public Library participated in METRO but Princeton and Columbia did not. Neither Harvard nor Yale belonged to NELINET.[38] Thus the concept of a consortium of libraries was de rigeur by 1972, but Haas's idea for a preservation consortium composed of the nation's largest research libraries was new. He envisioned a small consortium that would function for a trial period as a precursor to a national library corporation: a large consortium requiring formal commitments of its members over a long term was necessary for addressing the preservation problem. By 1972 academic libraries had no history of major cooperative efforts for preservation or dissemination on a national scale. Failure of the project of the trial consortium would suggest that another approach was necessary or that "the time was not yet ripe for effective collective action toward preservation goals."[39]

With Haas's leadership a small group of major research libraries concerned with resource development and preservation did organize in the early 1970s. This group went on to form a national library corporation that has gone farther than any other agency in developing models for a national preservation program.

II. THE PRESERVATION PROGRAM OF THE RESEARCH LIBRARIES GROUP

Not long after the release of Haas's report, a series of meetings took place among administrative staff of four major research libraries in the Northeast: The New York Public Library, and the libraries of Columbia, Harvard, and Yale Universities. There was a precedent for cooperation involving this same group: in 1952 a Trustees' Committee of Harvard, Yale, Columbia, and the New York Public Library was established in response to concern about the problems of research library growth. This committee issued a report in October 1952 which focused on reducing library growth rates by means of coordinated acquisitions and on designating items "to be kept permanently in one copy only, either in a library which was particularly strong in specific subject fields, or in a jointly sponsored regional deposit facility."[40] The report proposed the appointment of a director of research and a planning staff who would investigate the problem further and develop a program. Such a structure, however, was never erected, and no formal cooperative activity involving all four libraries occurred during the next 20 years.

In June 1973 the directors of the four libraries approved a "Program Statement for a Consortium of Research Libraries." The statement identifies eight problems facing research libraries, including the escalation in the annual production of recorded information that is of potential importance to scholarship and the inability of individual research libraries to collect and preserve a full representation of the human record. It is argued that not only the quantity but also the specialized nature of recorded information is difficult for users to access and for libraries to manage:

> The library goal of comprehensive collecting is a corollary of the social impulse permanently to record events in detail. Together, these factors have added not only to the bulk of the record, but have reduced to very low levels the rate of use for any given item in many subject categories. More and more of what is collected is actually used less and less.
>
> The growing complexity of research libraries, stemming in large part from sheer size and the linguistic, subject, and format characteristics of research collections, requires of library users a greater sophistication than is generally prevalent. There is evidence that this complexity actually inhibits use which in turn generates new and sometimes expensive library responses intended to mitigate problems.[41]

The program statement further points out that relationships among suppliers of information, libraries, and users are changing. Consequently, research libraries associated with universities face the prospect of expanding responsibilities beyond research support into such areas as "social

science documentation services, centers for access to computer-stored information, and extension of service to groups beyond the university."[42]

Given these forces, the authors assert, scholars and research libraries must reexamine their objectives and methods because effective operation in the future will be different from that of the past. Fiscal constraints dictate a need for change, but change would be necessary even if the supply of money were limitless since "money by itself cannot assure effective operations....There are other valid questions about the level of funds and skills that should properly go to research libraries in the context of other social needs."[43] The authors state that change within individual libraries as well as change in the ways research libraries work together is essential.

Therefore Columbia, Harvard, and Yale universities and the New York Public Library have joined together in a permanent affiliation with the objective of improving the performance of these four libraries individually and collectively. The authors add that "from the beginning, this organization will be developed with the prospect of extension to include other research libraries."[44] The participants declare that they are prepared to take the following specific actions as proof of their commitment to the group: standardizing on Library of Congress classification and subject headings; following the MARC format in machine-readable bibliographic records; accepting common authority files; and sharing in the acquisition of such materials as serials, expensive sets, large microform files, and computer-based data archives. The authors foresee holding some materials as jointly owned property that would be transported among institutions by means of frequent delivery service or relayed by facsimile transmission when the technology permits.

Finally, the program statement calls for the development of a plan of action that identifies objectives for the consortium and sets priorities for their accomplishment. The plan should address technical and administrative aspects of the alliance and should examine "institutional policies governing access, practices related to bibliographical control, collection development and conservation objectives."[45]

Although the library directors' program statement of June 1978 said little specifically about preservation, it laid a foundation for cooperative preservation efforts by demanding critical thinking about the future role of research libraries in society, by setting the tone for long-range planning, and by articulating an attitude of cooperation.

A plan of action written by Joseph A. Rosenthal was released in December 1978. This study refers to the consortium as "the Research Libraries

Group" (RLG) and discusses its administration and its relationship to the national library community. Rosenthal presents detailed recommendations concerning projects in bibliographic data, communication, access to materials, shared development of collections, and conservation and preservation.

In this last area Rosenthal suggests that "the consortium should enhance individual library efforts by pooling and extending information on the one hand and by engaging in worthwhile cooperative projects on the other."[46] He identifies nine aspects of a conservation and preservation program in an individual library, including proper environmental conditions in library buildings, replacement policies for lost and mutilated items, deacidification, and emergency treatment of damaged materials. Rosenthal observes that the New York Public Library alone of the libraries in the consortium has an integrated preservation program covering most of these aspects. Harvard and Yale have recently expanded their programs and Columbia intends to assign staff resources to preservation. In the three university libraries, however, the staff working with various aspects of the physical care of materials do not share information, and they lack procedures for determining priorities and options for treatment of specific items. Further, the university libraries have committed resources to caring for their special collections but have paid little attention to the bulk of their collections.

In order to remedy this situation, Rosenthal suggests that the consortium establish a committee on conservation and preservation that would operate a clearinghouse for information and sponsor cooperative projects. The clearinghouse would communicate current state-of-the-art knowledge about equipment, procedures, and standards to staff members making policy and to those responsible for daily operations. The plan suggests that the need for formal training in preservation should be met by new programs under the joint sponsorship of the RLG and one or more accredited library schools. Meanwhile, the services of trained personnel should be obtained on a consultant basis in areas for which RLG staff lack expertise. A related function of the RLG Committee on Conservation and Preservation would be considering and making recommendations to the RLG Board of Directors regarding the joint purchase or lease of expensive equipment for binding, restoration, and deacidification. Without implying that all major equipment should be held in common, Rosenthal remarks that the consortium is an apt setting for evaluating new equipment before individual libraries make purchases.[47]

After commenting that the most promising possibilities for cooperative projects are those involving the coordinated preservation of specific library

resources such as serial runs, Rosenthal sets forth a number of procedures to be followed in a cooperative microfilming program. He does not identify a particular group of materials having priority, referring such decisions to the RLG Committees on Collection Development and User Services. Although he proposes that the RLG conservation and preservation clearinghouse would provide assistance in the bibliographic searching necessary to determine whether commercial firms or other libraries had already filmed an item, Rosenthal does not advocate using a central facility for microfilming. He suggests instead that "the actual production work should be performed by the RLG library having the most extensive file." The holding library would produce both a master negative and a positive which would remain in its possession; the positive should become available for interlibrary loan. The decisions as to retention of original volumes in hardcopy and as to purchase of a positive microform would be up to the holding library. Rosenthal makes further recommendations regarding the pricing of positive copies. Without specifying details of a register of RLG master negatives, he suggests that reports would be made to the proposed serials database discussed in another chapter of the plan. He points out that "the development of the common bibliographic database...should facilitate the location of copies and holdings..., although the initiation of a preservation program need not await completion of the bibliographic structure."[48]

Rosenthal's chapter "Conservation and Preservation" is only a small section of a lengthy proposal for a complex network of research libraries. Nonetheless, the urgency of efforts in this area is stressed, and the success of the consortium is portrayed as contingent upon the physical state of the collections: "Of what use will processing and delivery systems and agreements on shared development of collections be if most materials in the four libraries are too fragile to be used or transported?"[49]

There are echoes of Haas's ideas for a preservation consortium in Rosenthal's discussion of the separability of conservation and preservation projects:

> A long-range scheme devoted to care and maintenance of collections could operate on the whole quite independently of other cooperative endeavors, although more effective bibliographical access within the RLG will undoubtedly benefit combined efforts in the preservation field.[50]

Rosenthal suggests that the separability of preservation projects makes them suitable for external funding especially because the materials are a significant part of North American bibliothecal resources.

Many of Rosenthal's ideas were embodied in activities of the RLG Preservation Committee which developed plans for the group's first microfilming project and discussed a long-range preservation program. The committee established a microfilm pricing policy and wrote procedures and forms to ensure communication among the members. After investigating the possibilities of joint contracts with commercial filmers and joint storage of master negatives, the committee decided to let the member libraries decide individually on the selection of a filmer, quality control, storage, and service of items selected for filming. Each library was also responsible for the preparation and bibliographic work involved in selecting titles for filming.[51]

With these guidelines the four libraries proceeded with a cooperative filming project funded in 1977 by an allotment of $60,000 from the Research Libraries Group. The purpose of the project was to microfilm brittle and fragmented multivolume sets and discontinued serials of value to other research libraries and not available through commercial producers. Each RLG member received $15,000 that was to be applied to filming costs only. At the conclusion of the project, 61 multivolume titles containing over 120,000 pages had been filmed. The master negatives are held by the host institution which makes positive copies available to other institutions upon request.[52] When Harvard withdrew from RLG in 1979, its films were transferred to Yale for storage and service.[53]

The other three founding members—Columbia, Yale, and the New York Public Library—continued to support the consortium. In July 1979 a statement reiterating the purposes and goals of the Research Libraries Group was signed by the presidents of eleven institutions: Columbia, Stanford, Yale, Princeton, Rutgers, and Brigham Young universities; Dartmouth College, the New York Public Library, and the universities of Michigan, Pennsylvania, and Iowa.[54] In 1978 work began on converting Stanford's BALLOTS online database into the Research Libraries Information Network (RLIN) of RLG and its extension to research libraries outside the Northeast, the trial consortium was transformed into a national library corporation.

The 1979 *Progress Report* of the RLG listed the preservation of research materials as one of its "four active programs directed toward the primary goals of the organization."[55] The other three programs were: cooperative collection development, shared access to collections, and the creation and implementation of sophisticated bibliographic tools. This report said that future preservation activities might include: (1) converting bibliographic records for preserved items to machine-readable form in order to assure

coordination and to prevent duplication, (2) exploring the potential of preservation by optical image storage, and (3) planning for a central facility for microprocessing and storage.

After the RLG Preservation Committee was reconstituted in 1980, it began an impressive set of projects. The goals of the RLG Preservation Program as stated in 1983 include the following:

> To ensure continuing availability of research resources in all appropriate fields by developing plans for sharing preservation responsibilities; to define policy issues regarding members' preservation responsibilities and the relationship of these to their collecting responsibilities;...[and] to evaluate available preservation-related technologies and assess RLG's potential as a site for pilot projects, testing, or experimentation.[56]

The focus of the program has been on using microform technology to preserve the intellectual content of materials printed on paper that have little artifactual or intrinsic value as objects. Three major projects were underway in 1983: enhancements to RLIN, bibliographic control of master negatives, and the Cooperative Preservation Microfilming Project.[57] The latter two projects have been funded by external sources, an outcome consonant with Rosenthal's suggestion in his 1973 plan.

RLIN is the only shared cataloging system that offers features for exchanging specific information about titles that have been or will be microfilmed. Since the U.S. MARC 007 fixed field for physical description became available in the fall of 1981, catalogers using RLIN have been entering information about the type of microform represented by a particular record. RLIN has five codes for distinguishing generations of microforms—i.e., whether it is a preservation master, a printing master, a service copy, etc. By searching the database with the generation code, it is possible to isolate microform copies of a title from those in hardcopy. Catalogers enter into the 533 variable field photoreproduction notes including imprint and physical description of the microform. When an institution makes a decision to film an item, it immediately records this information in RLIN's Queuing Date field. In this way, duplication of filming efforts by other institutions is prevented while the item is being processed.[58]

By means of these routines established for ongoing work and by means of projects for the retrospective conversion of records for master negatives, RLIN has become the best single source in the United States for bibliographic control of microfilm masters. RLG members have been contributing records to the *National Register of Microform Masters* (NRMM) published

by the Library of Congress for years 1965-1983. Under LC's new program, "records for monographs received from 1984 are being included in the automated *National Union Catalog*, while serial reports are being included in *New Serial Titles*."[59] The multiplicity of volumes of the NRMM, of microfiche sets of the NUC, and of directories and guides published by microform producers impedes searching. Poor bibliographic control has handicapped microfilming programs whose sponsors have been reluctant to undertake the expense without assurance that an item has not already been filmed. The studies by Haas and Rosenthal addressed aspects of this problem.

In November 1982, with a grant from the National Endowment for the Humanities (NEH), eleven RLG members began entering into RLIN their records for collections of master negatives. The New York Public Library, which has been active for several decades in microfilming, did the same thing in a separately funded project.[60] Upon completion of the former project in early 1984, the Research Libraries Group published the first edition of the *RLG Preservation Union List* for distribution outside its membership. A set of microfiche showing all retrospective and current records entered into RLIN since October 1981, the first edition of the *Union List* contains citations for masters for over 25,000 works held in RLG member libraries.[61] Using information from the list, librarians can order service copies of preservation masters from individual RLG libraries.[62] A second edition containing 47,000 citations for microfilm master negatives and printing masters was published in May 1985. Production of both editions was made possible by grants from NEH. A third edition of the *RLG Preservation Union List* is scheduled for publication in 1986.[63]

The most exciting example of efforts by research libraries to work together to reach major preservation goals is the RLG Cooperative Preservation Microfilming Project. Supported by grants from NEH and the Andrew W. Mellon Foundation, the initial phase of the project began on 1 May 1983 and will last for three years. The target of this phase is monographs published in or related to the United States from 1876 to 1900. The seven RLG members involved have accepted areas of contribution based on their collection strengths. Thus Brown University is filming American poetry from the Harris Collection while the University of Minnesota is contributing films of the Hess Collection of dime novels. Yale University has chosen from LC subject fields E and F, American history excluding the Trans Mississippi West, a field which is being covered by the University of California at Berkeley. Similarly, Columbia University, the New York Public Library, and the University of Michigan have selected broad subject fields from the LC classification schedule. Having agreed to coordinate its

preservation microfilming activity with the RLG project, the Library of Congress is deferring its own filming of U.S. imprints in those classes chosen by RLG members. For the initial phase of the project LC is filming some 1700 heavily used historical and genealogical records from the period 1876-1900. It is also contributing films of serials and is filling gaps in classes being completed by RLG members.[64]

For the Cooperative Preservation Microfilming Project, staff in the participating libraries survey their collections systematically and evaluate every U.S. monograph of the period 1876-1900. Three criteria must be met before a decision to film an item is made: (1) a curator deems the volume worthy of preservation, (2) no other microform master of the item can be located, and (3) the item is suitable for filming as determined by factors such as completeness and the presence of plates. The *RLG Preservation Manual* published in February 1983 contains specifications for film and storage and guidelines for quality control, prefilming procedures, handling "problem volumes," and for the identification of material filmed.[65] The Research Libraries Group has leased a vault for joint storage of master negatives produced by the project. Members may also store their own masters in the vault which is managed, equipped, and monitored by RLG. If they choose to do so, however, they retain responsibility for assigning storage numbers to films, entering records into RLIN, and processing requests for copies of stored materials.[66]

RLG views the Cooperative Preservation Microfilming Project as "a practical model for a nationwide, coordinated preservation program."[67] Elements of such a program include the compilation of accurate cost data and the development of model guidelines, procedures, work forms, and standards. The project tests the new RLIN features designed to aid preservation efforts and serves collection development by improving online access to a range of important research materials. Further, the project allows the library community to measure more accurately the American publishing output and to estimate better what portion has already been preserved.[68]

The original ideas for this filming project and for the preservation-related enhancements to the bibliographic database may be traced to the studies written by Haas and Rosenthal. Although Rosenthal's conception of a clearinghouse for conservation information did not materialize, its purpose was at least partially fulfilled with the publication of the *RLG Preservation Manual*. In addition to the specifications and guidelines already mentioned, the manual contains a statement of purpose for the RLG Preservation Program and a "Workbook" with relevant definitions and specialized bibliographies. Despite the comprehensiveness of the

initial phase of the microfilming project and the promise of increased activities in the future, RLG portrays its efforts quite modestly in light of the nation's preservation needs:

> RLG members do not assume that, even as a group, they alone can meet the preservation needs of the scholarly community. Rather, they hope to develop model programs and establish a structure that could be extended to and coordinated with the efforts of a variety of organizations and institutions.[69]

There are many indications that this hope is becoming a reality. As noted earlier, the Library of Congress has already begun coordinating its preservation efforts with those of RLG. In November 1984 officers of the Research Libraries Group and the British Library signed a memorandum of understanding "that signals coordinated preservation activities, exchange of records and files between their respective databases, and exploration of direct electronic communication for interlibrary loan."[70] In the United States two preservation microfilming projects with focuses complementary to that of the initial phase of the RLG cooperative project are being mounted. The American Theological Library Association, which has been filming theological serials for many years, is planning a project to film theological monographs published between 1860 and 1929. The American Philological Association has received grants from NEH and the Mellon Foundation to preserve on microform important works published between 1850 and 1918 in the field of classical studies.[71] The titles are being chosen by an editorial board composed of scholars with a range of interests in classical studies.[72] The photographic work for the classics project is being done by the Preservation Department of the Columbia University Libraries; RLIN and RLG's storage facility, standards, and pricing policies are being used.

By means of these RLG projects and of others that support the efforts of individual libraries, a base of support for preservation is being established nationwide. With this structure, national planning becomes more feasible and more productive.

III. THE EVOLUTION OF A NATIONAL PRESERVATION PROGRAM IN THE 1980s

A "Planning Conference for a National Preservation Program" was convened at the Library of Congress in December 1976 for the purposes of assessing the magnitude of the problem, finding ways "of informing the nation and the world about it," and identifying approaches to solving it.[73] Since the ARL Preservation Committee had identified very similar pur-

poses in 1965 after the release of Gordon R. Williams's report, it would appear that little had been accomplished in twelve years. In his speech at the 1976 conference, Williams cited reasons why the library profession had been laggard:

> (1) lack of heavy patron pressure to improve the condition of materials; (2) concentration on *building* collections without attention to on-going maintenance; (3) the non-"rare" nature of most deteriorating materials, though they may be scarce or even unique; [and] (4) the enormous volume which makes only mass treatment economically feasible, together with the lack of effective mass treatment techniques.[74]

Williams continued to advocate the transfer of materials from holding libraries to a central facility with optimal storage conditions.

Speaking at the close of the conference, Warren J. Haas expressed his conviction "that developing the capacity to act may deserve as much attention as anything."[75] He advised that problems of selection and of setting priorities for preservation would be resolved once we have developed "a national capacity that will provide us with options among which individuals, acting in their professional capacities, can choose."[76] As vice president of the Council on Library Resources, Haas announced that the CLR would provide modest funds to support a steering committee responsible for coordinating the next phase of development for a national preservation program.

Just as his predecessor had agreed in 1965 to accept responsibility for implementing a program based on the Williams report, so did Librarian of Congress Daniel J. Boorstin assert at the 1976 conference that it was "the duty of the Library of Congress to assume the leadership, in collaboration with all affected and interested parties."[77] Although LC established an ad hoc Advisory Committee for a National Preservation Program and announced the appointment of a national preservation program officer in June 1977, both actions were short-lived. The committee met only twice, and the officer resigned after six months. No further action was taken on the committee's recommendations. For various internal, fiscal, and political reasons, the Library of Congress was "unable to assume the leadership role it had announced."[78]

In the meantime, the initiation of preservation efforts by RLG and growing awareness of the importance of preservation programs in individual libraries stimulated academic librarians to turn from the attitude of waiting for a savior to that of helping themselves.[79] A prominent preservationist expressed in 1979 "the belief that a 'national' preservation program decreed and directed from central source of power/knowledge/funds is neither practicable nor desirable at the present time."[80]

It seems likely that this attitude informed the new direction taken by the Association of Research Libraries, which had led the movement to establish a national plan for the preservation of library materials in the years 1954-1972. ARL turned its attention in the late 1970s to supporting preservation programs in individual libraries. Both the Haas and Rosenthal plans had emphasized the necessity of increasing the pool of knowledge and trained personnel, but progress was slow.

The first survey of preservation efforts in larger U.S. academic libraries was conducted in 1972 by Gay Walker, preservation librarian at the Yale University Library. The results of Walker's survey of 115 academic libraries, each with holdings of 500,000 volumes or more, were not published until January 1975. Of the 86 respondents, 62 libraries or 72% reported some preservation procedures. For most libraries these procedures were rudimentary repair operations, but a few libraries had developed "more sophisticated programs of replacement, reproduction, withdrawal, and special repairs." All of the libraries handled high-use items needing repair; of the total number of items processed, most were titles that had circulated recently. Forty libraries used stack checks to identify other items needing attention while 25 relied upon staff reports. Only four libraries had independent operations with one or more staff members whose primary duties were "preservation activities of an organizational and decision-making nature." In 39 libraries preservation activities were conducted in technical services departments; in 15, circulation departments. Walker concluded that only three or four academic libraries had "instigated preservation programs to deal with the problem in its entirety."[81] Urging these libraries to communicate their experiences, she devoted half of her article to outlining a model program. She described the first steps as surveying the stack conditions and formulating a preservation policy that establishes criteria and goals.

The information about preservation programs in Walker's survey was corroborated by the informal assessments of Haas and Rosenthal. In light of Walker's statement that few large academic libraries were able or rich enough to institute techniques such as those being practiced at the New York Public Library and the Library of Congress, it seems odd that LC's Preservation Department was recommended as a model for research libraries in an article published in the January 1976 issue of *The Journal of Academic Librarianship*. Karen Lee Shelley wrote that "there is now sufficient justification for every research library to employ a conservation librarian and to have or be developing some type of Conservation Department."[82] Yet even if major research libraries had been able to afford a conservation specialist in 1976, there were not enough to go around. There were no formal training programs until 1981 when the Columbia Univer-

sity School of Library Service offered programs for educating conservators of library materials and preservation administrators. Both the Walker and the Shelley articles attest to the primitive state of knowledge about preservation administration in the mid-1970s.

The Systems and Procedures Exchange Center (SPEC) of the Association of Research Libraries, Office of Management Studies (OMS) has conducted several surveys of preservation efforts in member libraries. The first SPEC survey in 1977 showed that very few libraries had articulated policies and procedures. "Although planning had begun in several more, it was often focused on the binding component."[83] The greatly increased activity in library preservation planning that occurred in the late 1970s was documented by the second SPEC survey of March 1980. Forty libraries reported having conducted a formal study or needs assessment; 28 had adopted policy statements; and 58 were operating an active preservation program with an average of three employees assigned full or part-time to aspects of the program. An additional 19 libraries intended to implement such a program within five years.

This expansion was expedited by certain external catalysts such as management studies and surveys by consultants, the preservation self-study module of the OMS Collection Analysis Project, and grants enabling institutions to dedicate staff to preservation projects. Efforts in many libraries had been frustrated by cost implications, and a dominant theme of responses to the 1980 survey was that "the scope of preservation issues vastly exceeds the resources currently available."[84]

The report on the SPEC survey listed three ingredients necessary for planning by libraries: (1) dissemination of technical information and procedures; (2) an increase in the number of specialists trained to direct local programs; and (3) "the creation, on the local level, of an organizational capability to develop preservation programs and incorporate them into the operational structure of the library."[85] The first need was being met by the growing literature and in particular by three SPEC Kits issued in 1980: *Planning for Preservation, Disaster Prevention and Preparedness,* and *Basic Preservation Procedures.* More widely available workshops and introductory courses were increasing the pool of knowledgeable persons if not specialists. OMS was addressing the third need through its Preservation Project, begun in early 1980 with funds from the National Endowment for the Humanities.

The NEH grant was specifically for the design and testing of a "self-study procedure to enable academic libraries to identify and address preservation problems."[86] Pamela W. Darling, head of the Preservation Department at

the Columbia University Libraries, was employed by OMS to develop and test the planning process. Her draft manual was used by three ARL libraries—Dartmouth College, the University of Virginia, and the University of Washington—in pilot tests conducted in 1981. The manual was then revised and published in 1982.

In accordance with the stipulation of the NEH grant, the *Preservation Planning Program Manual* contains a methodology for libraries making a formal study of preservation needs as a foundation for planning programs to meet those needs. The methodology is based on the "assisted self-study" process in which an OMS consultant assists a team of the library staff in initiating and executing the study over a period of months. The manual can also be used profitably by libraries preferring a less formal or less intensive approach. The formal program benefits the organization because

> participation in the study process promotes staff learning and professional development, creating a broad understanding within the library staff of the nature and importance of preservation, and enhancing the ability of the library to respond to preservation needs on a continuing basis.[87]

Another phase of the OMS Preservation Project resulted in the compilation of the *Preservation Planning Resource Notebook*, also published in 1982, for use in conjunction with the manual. The purpose of the *Resource Notebook* is to provide access to background and technical information needed for planning preservation programs. Divided into eleven major subject areas, the *Resource Notebook* contains reproductions of over 100 articles and documents as well as references to many more.[88] Thus it is a library of the best and/or most important literature published through early 1982 on a full range of preservation topics.

Typically, the ARL Preservation Planning Program takes six to nine months to complete and involves 20 to 30 library staff members. The response was not gratifying in the first two years after publication of the manual and *Resource Notebook* because only a handful of ARL members beside those involved in the pilot test were attempting the formal study. A booster was in order, and in mid-1984 NEH awarded a grant of $65,375 to OMS for conducting planning studies in ten ARL libraries. A stipend of $1000 and free materials and consultation by OMS staff are being awarded to each library chosen. Applicants were judged by OMS and the ARL Committee on Preservation of Research Library Materials on the basis of their readiness to serve as a demonstration site, the adequacy of physical space for a preservation program, their willingness to support staff development in preservation, and their commitment to implementing the recommendations of the study. Of the ten participants selected, eight are academic libraries: Colorado State, Iowa State, Missouri, Northwestern,

Ohio State, Oregon, SUNY Stony Brook, and Tennessee. The studies should be completed in late 1986, and the results will be disseminated to the library community by OMS.[89]

The Association of Research Libraries cosponsored a major cooperative effort to obtain detailed information about preservation microfilming activity in North America and to assist in coordinating and increasing such activity in the future. The preservation committees of ARL and of RLG, the Research Libraries Advisory Council of OCLC, and the American Library Association/Resources and Technical Services Division, Preservation of Library Materials and Reproduction of Library Materials Sections cosponsored the preparation and distribution of a preservation questionnaire. It was sent out in May 1984 to 202 institutions, including all members of ARL, RLG, the Independent Research Libraries Association, and the Canadian Association of Research Libraries. The questionnaire was also sent to the major historical societies and state archives and to other libraries that reported production of preservation microfilms in a survey conducted in 1981 by ALA.[90]

The results of the survey will be published in the final report of the ARL Microform Project. Preliminary results have identified trends and revealed weak areas in preservation microfilming programs. There is an increasing commitment to preservation among Canadian and U.S. research libraries; however, some institutions had not made any commitment as of the fall 1984. "A number of respondents, including some large research libraries, indicated that their libraries have not yet addressed preservation needs, do not give priority to this process, and believe that preservation is not a major issue."[91] Among libraries that have significant preservation programs there is an alarming inconsistency in such operations as record-keeping, levels of activities, functions performed, and practices regarding policies and guidelines. Exceptions to this picture are a few libraries with excellent model programs. Although 54% of the survey respondents indicated that they produce microforms, some do not keep production records and others produce a quality of microform that is below preservation standards. Of the respondents, 70% were willing to participate in cooperative projects; many of these said that their participation would be contingent upon securing external funding. Over half stated that they would be more likely to participate in a cooperative project if an outside facility was available for producing microforms.[92]

It follows from the fact that many libraries do not keep records of preservation activities that an accurate national census of such activities is impossible. Given that only a few research libraries had preservation programs in 1975, it is not surprising that sophistication in such programs was not

achieved by 1984. One can conclude from the survey results that research libraries need guidance in managing their preservation programs as well as financial support and access to treatment and production facilities. The survey shows that research libraries have not perfected what Haas called "the capacity to act": coordination is needed to eliminate the haphazard aspects of current efforts, to make cooperative programs practical, and to prevent duplication of efforts in microfilming.[93]

In order to foster a commitment to preservation by each ARL member, the Committee on Preservation of Research Library Materials drafted *Guidelines for Minimum Preservation Efforts in ARL Libraries* which was approved by the ARL membership on 25 October 1984. The guidelines refer to ARL's Five Year Plan adopted in 1983. The plan asserts that "individual research libraries bear responsibility for preserving their collections as part of the collective resources of the research libraries of North America." The third principal objective of the Five Year Plan is "to increase the number of member libraries engaged in programs to preserve their collections." The Association of Research Libraries is therefore directing its efforts at helping libraries meet this local responsibility. The guidelines define "minimum" as

> a desirable and presumably practical level of moderate strength to which all ARL libraries should aspire in the course of this decade. Once attained, it is a level which should be able to be maintained over the long term....It is hoped that this minimum level is one which by 1988 at least half the ARL membership could attain or exceed; and by the end of this decade all ARL libraries could have attained or exceeded.[94]

The writers of the document then delineate five aspects which "taken together should constitute a good base of minimum effort": (1) local program statement, (2) statistics, (3) national participation, (4) environmental conditions, and (5) current budgetary effort.

Under this last aspect, the guidelines recommend that "the library should allocate to measurable preservation activities an amount equal to at least 10% of its expenditures for books, serials and other library materials or 4% of its total expenditures."[95] After stating that ARL will review the guidelines every three years, the authors discourage use of the measures for accreditation purposes "since the field of preservation is too uncertain to warrant such a rigid approach." Rather, as the authors point out, "the current generation must set some goals and strive mightily to achieve these if in fact we are to guard against leaving for our successors a literally impossible task."[96]

While the Association of Research Libraries has been concentrating on supporting the development of local preservation programs in member

libraries, the Council on Library Resources has followed through on sponsoring a steering committee for a national preservation program as Warren J. Haas announced at the 1976 conference. CLR and the American Association of Universities (AAU) established a Task Force on Preservation which completed a study of the needs of research libraries in late 1981.[97] Calling for a national plan and continued program development at the local level, the task force did not add significantly to existing plans or knowledge. Nonetheless, it was important that a professional association representing the higher education community became involved in planning for preservation.

The American Council of Learned Societies (ACLS) joined CLR and AAU in sponsoring a conference entitled "Toward the Twenty-First Century: Research Libraries and Their Users" in December 1982 at Wingspread in Racine, Wisconsin. Participants at this conference included some 40 university administrators, library directors, faculty members, and foundation executives. The title of the conference reflects the fact that many topics of importance to research libraries, including preservation, were addressed. The purpose of the discussions was

> to identify and explore the primary issues needing attention if scholarship is to be well served during the years ahead as libraries transform themselves (and are transformed) by technological change of unprecedented dimension and the new economic realities induced by that technology, by additional user expectations, and by fundamental restructuring of library service and information systems.[98]

This expression of concern for the future of research libraries closely resembles that of the "Program Statement for a Consortium of Research Libraries" signed in June 1973 by the library directors of Harvard, Yale, Columbia, and the New York Public Library. Participants at the Wingspread Conference realized that resolution of the questions raised there would require persistent attention by many people. They therefore proposed that a continuing series of meetings be held to consider specific topics in detail and to encourage discussions of these topics in other settings.

The first such meeting, again sponsored by CLR, AAU, and ACLS, was held in October 1983 at Wye Plantation, Maryland. The topic was "National and Regional Aspects of Collecting and Preserving Library Materials." There had been consensus at Wingspread that "individual libraries must often make their collecting and preservation decisions in a larger context if true distinction in institutional subject collections is to be maintained and the national capacity to support research is not to erode."[99] Discussions at the Wye Plantation conference focused on the implications

and means for application of this principle of interdependence. The participants recommended that the Council on Library Resources "begin the process of finding an appropriate way to shape a preservation strategy."[100]

A paper summarizing the discussions and recommendations concerning preservation by the conferences at Wingspread and Wye was drafted by CLR and distributed to ARL directors. The paper was presented at the spring 1984 meetings of the Association of Research Libraries and the Association of American Universities.[101] The anonymous authors of "Preserving Our Intellectual Heritage: General Directions and Next Steps" deny that it is a draft for a comprehensive national plan. They report that the discussions raised questions about whether "a 'national plan' in the full sense of that term" was appropriate: it seemed more important to take actions to preserve library materials "in the context of a reasonable but generally described national strategy." After dividing the preservation problem into the prospective and the retrospective, the authors discuss steps for solutions to the prospective problem being taken by the Library of Congress and the National Library of Medicine. They acknowledge that there has been modest progress on the retrospective problem, which is the focus of the paper, and assert that the time has come "to build on the strong foundation that has been put in place during the last decade or so."[102]

The paper discusses five requirements that must be met in order to achieve goals for retrospective preservation:

1. A method for establishing principles, formulating policy and priorities, and meeting specified objectives.
2. Acknowledgment of the cost of, and securing funding for, expanded preservation activity.
3. Additional production facilities for conservation treatment and content preservation, and expanded efforts to recruit and train conservators.
4. Expanded research capabilities to develop more effective uses of technologies, formulate efficient operating modes, and undertake economic planning.
5. An expanded educational and informational program to promote understanding and support for commitment of public funds to protect society's intellectual heritage.[103]

Earlier preservation plans and the results of the ARL survey had identified similar needs. The 1984 CLR paper, however, suggests new concepts and more feasible strategies for meeting those needs.

Whereas Haas's 1972 report had proposed a preservation consortium as a model for a national library corporation, the 1984 document stresses the necessity of forming a permanent organizing structure that includes nonli-

braries. The new structure should involve individuals from "the key scholarly associations in the American Council of Learned Societies, the Association of American Universities, and knowledgeable specialists."[104] The conference discussions had not sought to specify a permanent structure, but they recommended that a "first state" body be formed to continue discussions and to promote action. CLR agreed to fund and host such a body for a limited time. The Committee on Preservation and Access, composed of twelve members and coordinated by Margaret Child of the Smithsonian Institution, first met in October 1984.[105] Certain topics addressed in the committee's interim report of July 1985 will be discussed later.

With regard to the formulation of policies, the 1984 paper emphasizes that "the idea of the 'nation's collection' must be established, along with a better sense that acquisition and preservation are opposite sides of the same coin." The authors reason that responsibility for preservation is implicit in the development of distinctive research collections that together constitute the nation's research capacity. They assert that "individual research libraries, even the most prestigious among them, must become, in a functional sense, 'branches' of the national collection."[106] Accordingly, each library must budget not only for purchasing but also for preservation.

In discussing funding the 1984 paper suggests a time frame of "at least a decade." The authors point out that institutional funds and foundation assistance alone will probably be inadequate; consequently, state and federal funding will be needed. They advise that evidence of private participation and agreement on a plan of action will probably be needed to obtain government suppport.[107]

In order to increase awareness of the problem and to garner public support, the 1984 CLR paper proposes an expanded educational and informational program. The authors comment that there is "as yet no cohesive public sense of a preservation ethic for the product of mankind's accumulated learning and experience." They admit that the goal is not preservation of every piece of information ever recorded,

> but rather that the important parts of the content of the human record and intellectual creativity be protected and made fully accessible for those who want or need to put the record to use. As a society, we don't really know how to do this well, and we will not learn until the substance of the question becomes widely understood and thoughfully considered.[108]

The paper stresses that a long-term effort will be necessary for gaining public support at the level required to perform sufficient preservation work and for establishing "what the interests and priorities of the public

are." Several types of information programs are suggested, including specialized studies of the relationship between resource availability and scholarly productivity, and university seminars for achieving "the understanding required as a base for an evolving perception of the true importance of this topic."[109]

The ARL Office of Management Studies has taken steps in this direction with the compilation of a SPEC Kit, *Preservation Education in ARL Libraries*. Libraries with substantial preservation programs have emphasized the importance of encouraging staff, readers, donors, and administrators of the parent institution to act in harmony with the library's commitment to preservation. Since the formal literature has been silent about providing guidance to library managers in devising and evaluating strategies for educating appropriate groups, SPEC has gathered materials from ARL members with active preservation programs. Thus far libraries have concentrated on developing training materials for staff, but some libraries have conducted reader awareness campaigns as well. The kit includes preservation policy statements, staff training materials, examples of posters and handouts for patrons, donor information, and printed guides to exhibits about preservation.[110]

With regard to the provision of treatments for materials, the 1984 CLR paper observes that regional production facilities serving groups of libraries are the best way of employing scarce talent, of training more staff, of establishing and enforcing qualitative standards, of promoting coordination regionally and nationally, of testing equipment, and of using storage facilities. The authors suggest the formation of separate operating organizations on the model of the New England Document Conservation Center, established in 1973 with CLR assistance. Representatives of institutions with major research collections should take the initiative for planning and development because their institutions need the services most critically. Local governing units for each facility would determine its administrative structure, the libraries to be served, the scope of services offered, and the technologies used. The governing boards as a group "would help set the national course for building an adequate operating capacity for retrospective preservation."[111]

In the summer of 1984 the Exxon Education Foundation provided $1.2 million to the Council on Library Resources for establishing a Mid-Atlantic Preservation Center. CLR announced that it was working with libraries in mid-Atlantic states to explore formation of a center. In September 1984 the New York Historical Society hosted a meeting for this purpose, and an ad hoc steering committee was formed with Donald Koepp of Princeton University as the convenor.[112]

Other steps in the direction of regional cooperation for preservation have been taken by two regional bibliographic utilities. AMIGOS, the broker for OCLC and for other library services in the Southwest, announced the creation of a preservation committee in May 1984.[113] The Southeastern Library Network (SOLINET) received a grant of $168,401 from the National Endowment for the Humanities for establishing a cooperative preservation program. Begun in October 1984 with the appointment of Lisa Fox as preservation administrator, the initial two-year project focuses on two functions: supporting the preservation efforts of SOLINET members by providing information, training, field service, and disaster relief; and cooperating with other regional and national organizations in preservation activities. The foundation of a treatment and production facility is not on the immediate agenda of the SOLINET program. Additional funding is being sought for future phases of the program.[114] SOLINET's efforts in preservation have special significance because libraries in this region have been among the slowest in the country to plan preservation programs. None of the academic libraries in the Southeast had belonged to the Research Libraries Group until the University of Florida joined recently.

It remains to be seen whether the provision of preservation services by brokers for the nation's largest bibliographic utility strengthens the weakest yet most important link in the chain of cooperative preservation efforts, namely, communication. The bibliographic infrastructure, crucial for registering information about originals and copies, is far from perfect. An overview of this topic was written in January 1985 by Mark E. Cain and Barbara Dean, program associates with the Council on Library Resources. In "The Management of Preservation Information," Cain and Dean state that local and national preservation programs require information management systems that link bibliographic records to records of preservation actions, decisions, and methods. The Columbia, Yale, and Stanford University libraries have extensive local preservation files that provide information about the condition of an item, the availability of replacements for purchase, and preservation decisions and actions taken. A retrospective conversion project at the New York University Library in 1982 included a component of recording information about the binding and paper condition of items in a local field; records were input into the RLIN database.[115]

It would be desirable to record preservation information in a nationally accessible database so that libraries might avoid duplication of effort. The Linked Systems Project holds the promise of such a database, but it will be some time before implementation of the standard network interconnection allows routine searching from any location. As discussed in part II, the

Research Libraries Information Network is the only national bibliographic utility that has sponsored the exchange of preservation information. Contributors of cataloging to RLIN have routinely been adding codes for the generation of a microform in the 007 field and notes with descriptive information in the 533 field. The Online Computer Library Center, the Washington Libraries Network (WLN), and the University of Toronto Library Automation System (UTLAS) have not offered preservation enhancements, but the common MARC format provides such a potential.[116]

Cain and Dean discuss four requirements for a national preservation information management system: (1) commitment to record preservation information routinely and carefully; (2) agreement on what is to be recorded; (3) agreement on how and where such information is to be recorded; and (4) a coordinating mechanism for providing national access to preservation information. With regard to the third requirement, the authors note that while acceptance of the MARC format implies agreement, use of the available fields is not uniform. Also, decisions must be made on whether to use separate bibliographic records for the original and reproductions or to combine all the information in one record. The former approach has been adopted by OCLC which is organized on a master record concept; the file structure of UTLAS, on the other hand, aggregates but does not integrate local records. Cain and Dean remark that "each system will have to resolve these difficulties, perhaps by simply providing the ability to execute a search for the preservation information recorded in each record."[117] The study concludes by calling for the establishment of an interim means of communicating preservation information between databases until the goal of the Linked Systems Project has been accomplished.

The importance of a coordinated bibliographic structure for the creation of an access system for preserved items is emphasized in the Interim Report of July 1985 by the Committee on Preservation and Access sponsored by the Council on Library Resources. The development of a design for such an access system appears to be one of the major tasks the committee has set for itself. Just as Haas's 1972 report introduced the idea of a preservation consortium as a prototype for a national library corporation, so does the "Interim Report" introduce the idea of an access system for an expanded body of information as the prototype for "new approaches to delivering library services with a bibliographic structure that, when appropriate, supports access as well as membership."[118]

The authors point out that the relatively low level of preservation microfilming in the past has not placed too heavy a burden on the existing

network for interlibrary loan. In the future, however, a greatly expanded program served by a sophisticated bibliographic system for identification and location may create new problems such as "increased fulfillment costs for libraries supplying copies from their masters and increased delays and procedural confusion for users." In order to prepare for an expanded program, the committee is seeking answers to a number of questions about the economics and organization of the distribution system for copies of preserved items. The committee members see in future cooperative preservation efforts the opportunity

> to experiment with new methods and new affiliations. In the final analysis, the ability to preserve deteriorated books and to make the copies widely accessible may serve as a kind of model for the "new" library that takes full advantage of technological possibilities.[119]

To achieve this goal, the "Interim Report" calls for a collaborative effort involving "all libraries with a primary interest, regardless of network affiliations." The authors think that the idea for a national collection will become a reality "only when a collaborative preservation program is acted on as a primary responsibility by research libraries and their universities." Believing that a national preservation strategy will be successful to the extent that it balances local and national interests, the authors set forth ingredients of such a strategy:

> [It] must start with the premise that individual libraries are at the heart of the program. Thus, the strategy must set forth conditions and expectations in such a way that local decisions can be made in the context of a national plan. The strategy must not impede local decisions; rather it should promote better-informed decisions.[120]

One can detect in the "Interim Report" an ambivalence or reluctance with regard to the enunciation of a national plan. The report begins cautiously with the admission that "a 'grand plan,' if there ever is one, will probably be evident only in retrospect. Progress in preservation is made one book at a time. Many libraries, moving in concert, will, over time, do many books." Observing and facilitating this "moving in concert" appears to be the committee's role. On the other hand, in stating their fundamental conclusion that a systematic approach to preservation is necessary, the authors seem to view their role as the articulation of a national plan: "The Committee seeks to present a comprehensive picture, not only of the ultimate plan, but also of the series of steps required to achieve the plan." In the discussion of organization for preservation near the end of the report, the authors conclude that the various distributed activities are not promoting the endeavor to build an awareness of a national collection:

> With only a few exceptions, goals are largely institutional. A way must be found to establish a credible national setting for preservation activi-

> ties....The need for a national "backdrop" for preservation work will grow with the volume of activity.[121]

The authors further argue that the distributed activities are leaving unaddressed important matters such as a more effective approach to providing access to materials and an expanded research effort. The "Interim Report" calls for a means of assuring that "essential operating components are brought into being as they are needed." An expanded program will require the capacity to monitor results with regard to cost control, production levels, and availability of the final product. There should also be "critical assessment of procedures and results by the scholarly community, administrators of universities, and government leaders." Development of these capacities would provide "a constructive approach to judging progress" in order to "satisfy obligations to funding sources and participants alike."[122]

The "Interim Report" concludes with a discussion of the organizational requirements for achieving a collaborative effort. The authors observe that

> models for solving the organizational and operational problems inherent in national undertakings range from those that simply "advise and assist" on the one extreme to those assigned full operating responsibility for extensive programs on the other....In the final analysis, any successful organization must deal effectively with the need to shape and maintain consensus on key matters, to stimulate necessary funding, and to assess and even insist on progress toward accepted goals.[123]

Finally, the authors stress that political acumen is required for building and sustaining the support of each constituency involved. The committee is scheduled to complete its work early in 1986, and a final report will reflect the judgment of its members on the matter of an organizational structure.

It is clear from the "Interim Report" that leaders in the preservation movement at the midpoint in this decade are motivated by an attitude very different from that informing the discussions at the 1976 conference when most expected the Library of Congress to assume the role of coordinating cooperative efforts among libraries. The steering committee suggested by Haas at the 1976 conference was convened eight years later, as a first step toward the formation of the "permanent organizing structure" including nonlibrarians that was discussed at the Wingspread and Wye conferences.

Not one of the major associations involved has yet volunteered to shoulder the burden of a permanent organizing structure for cooperative preservation efforts. Given current trends in library automation and networks, it seems unlikely that membership in the Research Libraries Group will expand to a majority of the nation's academic libraries. Indeed, Richard W.

McCoy, president of RLG, has commented recently that "perhaps RLG must recognize that it could lose some of what has made it successful in its cooperative or scholarly programs if it became too large or too diverse."[124] Similarly, the constituents of the Association of Research Libraries determine its agenda; ARL has supported local programs rather than sponsoring cooperative preservation projects among its members. The Council on Library Resources, which is not a membership organization, seems the most likely candidate for the task, but CLR has always stressed the temporary nature of its support which is sustained by grant monies. There has been no indication yet that a new foundation will be established with a mission of the preservation of library materials comparable to the National Trust for Historic Preservation whose mission is the preservation of buildings, sites, and objects significant in American history and culture.

The problems of preserving our architectural heritage are related to but not identical with the problems of preserving our intellectual heritage. Libraries of record have always been concerned with providing protection of and access to the portions of the human record that they have acquired. Librarians have awakened relatively recently to the reality that the continuing performance of this age-old function means a shared as well as an individual institutional responsibility, one that will ultimately require a nationwide preservation program. The conclusion to this paper will review highlights of this 30-year history and will speculate on the prospects for success in meeting collective preservation goals.

CONCLUSION

Of all the challenges facing academic libraries in the final decades of the twentieth century, that of preservation may be the most difficult for several reasons: (1) the size of the universe of materials needing preservation treatments, (2) the need to accept and promote the idea of a "national collection," and (3) the need to develop organizational structures for achieving effective collective action in preservation. This paper has compared the ways in which plans for national preservation programs have addressed the third factor. A brief examination of the first two reasons will illuminate the paramount importance for the future of viable cooperative structures.

As reported in section I, many people involved with book publishing first appreciated the gravity of the paper deterioration problem when the results of William J. Barrow's research showed that 97% of a sample of nonfiction books published between 1900 and 1949 had paper that could be expected

to last less than 50 years. Since that time the two largest nonacademic libraries and several major university libraries have surveyed their collections to assess the magnitude of the problem. The Library of Congress has estimated that over 6 million volumes in its collections have deteriorated to the point that one more use would risk irreparable damage.[125] Similarly, the New York Public Library and the Columbia University Library have estimated that 50% and 30% of the volumes in their respective collections require preservation attention.[126]

A CLR study estimated that "in ARL libraries alone, with collections numbering 305 million volumes, approximately 75 million volumes are currently at risk." After subtracting the preservation work underway and completed and after factoring in variables such as overlap among collections, this study determined that "in the next twenty years 3.3 million volumes of lasting importance must be converted to another form if their contents are to be saved."[127]

The technique of surveying a diverse population of materials in a very large university library system has recently been perfected by a team at Yale University with a three-year grant from the National Endowment for the Humanities. This large-scale study, the first in the United States, assessed the extent and nature of deterioration of books in a sample of over 36,500 that represented all the types and locations of materials in the Yale libraries with the exceptions of folios and rare books. The levels of air pollutants in New Haven are frequently high; although five of the library buildings are air-conditioned, the survey concluded that "in general the environment both inside and outside the library buildings at Yale was found to be inhospitable to the storage of library materials."[128] The survey results evince the need for a more aggressive preservation program. In Yale's collection of over 7.7 million volumes, 12.8% need immediate treatment, 8.1% have broken bindings, 37.1% have brittle paper, and 82.6% have acidic paper.

The statistics supply ample proof of the necessity of improved environmental conditions in libraries and of cooperative efforts to save the intellectual content of disintegrating materials. Margaret Child has admonished librarians that postponement of massive microfilming programs in order to assess the magnitude of the problem can no longer be justified:

> We already know...that, at the very least, 25 percent of the collections in any research library in this country will be brittle and are therefore candidates for immediate transfer to another medium. It is also abundantly clear...that the problem is rapidly going to become very much worse, because all but perhaps 10 percent of the remainder of the collections needs to be considered for prompt deacidification, or it too will

have reached a stage of embrittlement where copying is the only solution.[129]

Child goes on to say that it is foolish to spend any more resources in confirming the statistics. She allows one exception, the case in which local data must be gathered in order to convince administrators to budget for preservation.

Child has for many years been advocating a policy of "planned deterioration" for large amounts of material that libraries cannot afford to keep. The idea is to set priorities for retention and preservation based on collection strengths; nonselected groups of material would be discarded as they deteriorate.[130] In section I a contrast was drawn between Haas's idea of selective preservation and the idea that a copy of everything in research libraries should be preserved, as espoused in the 1964 ARL plan. Williams argued that each research library had made informed judgments as to the value of materials before acquiring them and that the cost of weeding would be greater than the cost of preserving everything.[131] Without disputing this reasoning, Haas mitigated its paralyzing implications by suggesting discrete subject areas as targets for coordinated preservation and resource building.

The idea of "planned deterioration," like Daniel Gore's "Farewell to Alexandria" idea of an effective, efficient academic library operating with a relatively small collection of highly used items, is hard for librarians to accept. Patricia Battin has observed that the historical development of universities and research libraries as autonomous institutional structures has crippled their internal and external organizational capacities for effective cooperative action. She points to the factor of "proprietary institutional pride" as having heavily influenced the aggregation and governance of our academic library collections.[132] Just as it is difficult for empire builders to retrench, so will it be humiliating for major research libraries to perceive themselves as "branches" of the national collection, as called for in the 1984 CLR paper.

It is fortunate, then, that the nature of the national collection has not engendered conflict. That the goal of cooperative preservation efforts would be a national collection of U.S. imprints seems to have been understood from the beginning, although it did not receive full articulation until recently. As discussed in section I, the 1954 plans for strategic preservation in the case of military attack spoke of saving "the materials of scholarship, of science, of technology."[133] The 1964 ARL plan stated that "the United States has a particularly strong responsibility to preserve U.S.

imprints, as well as a great interest in doing so"; it called for the acquisition and preservation by the central library agency of "all significant new books published in the U.S."[134] Haas's 1972 plan suggested an initial target of U.S. imprints published between 1870 and 1900; this was slightly diminished to 1876-1900 for the initial phase of the RLG Cooperative Preservation Microfilming Project. Two other microfilming projects mentioned in section II have targeted periods which extend to 1918 and 1929. We can expect that future projects will cover later segments of the U.S. publishing output.

This trend harmonizes with the conception of preservation responsibilities at the international level: "There is general agreement among librarians that each country should assume responsibility for its own imprints."[135] The Library of Congress has announced that it will take responsibility for prospective preservation of U.S. imprints. In 1984 Congress appropriated $11.5 million to construct the Mass Book Deacidification Facility. Construction at the site in Fort Detrick, Maryland was scheduled to begin in January 1986, and the facility should be fully operational by December 1987. The facility will contain equipment for neutralizing the acid in book paper so that the book's life can be extended about 500 years. Operational costs for the facility are estimated at $2.5 million per year at a capacity of 1 million volumes per year.[136] The Library of Congress has made it clear that the mass deacidification facility will not be available to other libraries for the next 20 years. Some 13 million volumes from LC's collections will need treatment, and all new U.S. imprints will be deacidified before they are added to LC's holdings.[137]

One could consider this assumption of responsibility by the Library of Congress as a landmark in the history of cooperative preservation efforts because it allows research libraries to focus on the retrospective problem as outlined in the 1984 CLR paper. After accepting and then abdicating responsibility for leadership in preservation efforts in 1965 and 1976, LC has finally begun to gear up its National Preservation Program (NPP) during the last three years. NPP will serve as a nationwide clearinghouse for information and will sponsor publications and advanced internships. The plans also call for a "technical consulting service which will make expertise at LC more readily available."[138]

Despite the name of its program, however, the Library of Congress will not sponsor or direct national cooperative efforts among libraries. The Deputy Librarian of Congress has drawn the following distinction between kinds of collaborative efforts:

> The preservation of the country's library resources requires a collaborative effort that differs considerably from cooperative programs for acquisitions and bibliographic control, in which the Library of Congress has played the central role. Providing overseas materials and bibliographic records are functions well suited to a large centralized program. However, taking care of materials once they are in the library is another matter.[139]

He goes on to say that LC will participate in cooperative reproduction programs.

Consequently, the managerial and financial capacity for achieving goals in retrospective preservation will have to be developed by research libraries, their parent institutions, and their publics. Academic libraries have faced severe economic pressures for many years already because of the depressed state of higher education, and the future looks no brighter. It was precisely because universities lacked the financial resources necessary that the 1964 plan recommended that a federally supported central agency should coordinate a national preservation program:

> The research libraries that society depends upon to preserve what is literally man's memory are, with very few exceptions, supported by universities, and these in turn are supported by either relatively fixed endowments or by state funds. All of them have an equal interest in and need for access to the widest possible range of published records, and it is in the common, national good that this interest and need be satisfied. But the local resources to support these are unfortunately far from equal. In the situation where the interest, as also the responsibility and the benefits, are nationally shared rather than purely local, support by federal funds is not only the most reasonable solution but the most practicable one.[140]

It was some 15 years after the release of the Williams report that substantial federal funds were allocated to cooperative preservation projects by the National Endowment for the Humanities. Many of the RLG and ARL projects discussed in sections II and III received funds from NEH. The creation of a new Office of Preservation in January 1985 gives higher visibility to activities formerly housed in the Division of Research Programs. The president's budget request for FY 1986 includes $5 million for the new Office of Preservation. The office plans to support the following types of projects: problem solving, humanities documentation, cooperative efforts, informational materials, institutional preservation needs, and research and development.[141] In the autumn of 1985 the Office of Preservation announced an award of $625,000 to support the expansion of RLG's Cooperative Preservation Microfilming Project.[142] Since federal aid to higher education has diminished in recent years, it is significant that NEH has bolstered its support for preservation projects in academic libraries.

Another major funding initiative for preservation projects in research libraries has been established by the state of New York. In 1984 the legislature made annual grants of $90,000 available for preservation of materials to the New York State Library, the New York Public Library Research Libraries, and to nine academic libraries: Columbia, Cornell, Syracuse, New York University, the University of Rochester, and the four SUNY campuses at Albany, Binghamton, Buffalo, and Stony Brook. To meet eligibility requirements each library must present a five-year plan and an annual budget. Additional grants totaling over $1 million per year are available for preservation projects, and another $1 million is available to libraries, archives, and historical societies for the preservation of unique research materials. The sum of these grants from the State of New York is $3 million per year.[143]

Significant private funding is also being channeled to preservation projects by the Andrew W. Mellon Foundation and by the Exxon Education Foundation. If all three sources—federal, state, and private—maintain or increase this level of funding, the projected goal of $250 million for preservation over a 25-year period will be achieved.[144]

Surely these are signs that a larger public has heard the preservation message and is responding. Perhaps Americans are coming to recognize the major universities—the "flagship campuses" as one scholar has called them[145]—not as meritocratic and elitist institutions but as national resources, their libraries as repositories of the human record. Members of these universities have led the preservation movement over the past 30 years. If such recognition and support is sustained in the future, academic libraries will succeed in meeting the preservation challenge.

ACKNOWLEDGMENT

I would like to acknowledge the support of my mother, Jacqueline Hutzler Harper, and the encouragement and expedition of Professor Edward G. Holley.

REFERENCES

1. My use of diction agrees with the distinction between the terms *preservation* and *conservation* drawn by Pamela W. Darling: "Libraries are responsible for the care of materials which are physically endangered, and library preservation encompasses everything which serves to prolong the life of those materials and/or their informational content. I use the term 'preservation' in this broadest sense, reserving the term 'conservation' for those activities which involve physical treatment of individual items by a 'conservation technician' or professional 'conservator'....I intend to continue to use *conservation* to refer to that subset of

activities dealing with physical treatment, within a comprehensive *preservation* program which also includes preventative care and replacement or reformatting of information." Darling, Pamela W. "Preservation vs. Conservation." *The Abbey Newsletter* 9(Nov. 1985):96-97.

2. This perception in 1985 should be balanced with Darling's comment in 1980: "A whole string of articles has appeared in major American newspapers, wire service stories picked up and repeated with local variations." Darling, Pamela W. "Preservation: Today on a Shoestring, Tomorrow...?" *Library Journal* 105(April 1980):781-85. A recent spot in the popular press is: MacDougall, William. "Battling Father Time to Save a Vast Treasure." *U.S. News & World Report*, 22 April 1985, p. 68.

3. Dougherty, Richard M. "Preservation and Access: A Collision of Objectives." *The Journal of Academic Librarianship* 8(Sept. 1982):199.

4. Byrnes, Margaret. "Preservation of Library Materials: 1982." *Library Resources & Technical Services* 27(July/Sept. 1983):299.

5. Mowat, Ian R.M. "A Policy Proposal for the Conservation and Control of Bookstock in Academic Libraries." *Journal of Librarianship* 14(Oct. 1982):270.

6. Child, Margaret S. "The Future of Cooperative Preservation Microfilming." *Library Resources & Technical Services* 29(Jan./March 1985):94-101.

7. Tauber, Maurice F. "Conservation Comes of Age." *Library Trends* 4(Jan. 1956):215-21.

8. Ibid., p. 217.

9. Williams, Edwin E. "Farmington Plan." In *Encyclopedia of Library and Information Science*, vol. 8, edited by Allen Kent and Harold Lancour, pp. 361-68. New York: Marcel Dekker, 1972. Also consulted: Metcalf, Keyes D., and Williams, Edwin E. "Proposals for a Division of Responsibility Among American Libraries in the Acquisition and Recording of Library Materials." *College & Research Libraries* 5(March 1944):105-09.

10. Adams, Scott. "Proposed Plan for the Preservation of Cultural and Scientific Resources" (minutes of the Association of Research Libraries, 11 Jan. 1954). Madison, Wisc., pp. 25-31. Quoted in Tauber, "Conservation Comes of Age," p. 218.

11. Tauber, "Conservation Comes of Age," p. 218.

12. Williams, Edwin E. "Deterioration of Library Collections Today." In *Library Conservation: Preservation in Perspective*, edited by John P. Baker and Marguerite C. Soroka, pp. 7-21. Stroudsburg, Pa.: Dowden, Hutchinson & Ross, 1978.

13. Darling, Pamela W., and Ogden, Sherelyn. "From Problems Perceived to Programs in Practice: The Preservation of Library Resources in the U.S.A., 1956-1980." *Library Resources & Technical Services* 25(Jan./March 1981):11.

14. Williams, "Deterioration of Library Collections Today," p. 11.

15. Ibid., pp. 11-12.

16. Ibid., pp. 9-15.

17. Williams, Gordon R. "The Preservation of Deteriorating Books, Pt. I: An Examination of the Problem." *Library Journal* 91(1 Jan. 1966):51-56; and _____. "The Preservation of Deteriorating Books, Pt. II: Recommendations for a Solution." *Library Journal* 91(15 Jan. 1966):189-94.

18. Darling, and Ogden, "From Problems Perceived to Programs in Practice," pp. 12-13.

19. Shaffer, Norman J. "Library of Congress Pilot Preservation Project." Quoted in Williams, "Deterioration of Library Collections," pp. 16-17.

20. Darling, and Ogden, "From Problems Perceived to Programs in Practice," pp. 15-16.

21. Ibid., p. 16.

22. Haas, Warren J. "Preparation of Detailed Specifications for a National System for the Preservation of Library Materials." In *Library Conservation: Preservation in Perspective*," p. 417.

23. Ibid., p. 431.

24. Ibid.

25. Ibid., p. 432.

26. Ibid., p. 433.

27. Ibid., p. 434.

28. Ibid., p. 435.

29. Ibid.
30. Ibid., pp. 437-38.
31. Ibid., pp. 438-39.
32. Ibid., p. 420.
33. Patrick, Ruth J. *Guidelines for Library Cooperation: Development of Academic Library Consortia.* Santa Monica, Calif.: System Development Corp., 1972, p. 2.
34. Hamlin, Arthur T. *The University Library in the United States: Its Origins and Development.* Philadelphia: University of Pennsylvania Press, 1981, p. 182.
35. Ibid., p. 188.
36. Patrick, *Guidelines for Library Cooperation,* pp. 2-3.
37. Delanoy, Diana D., and Cuadra, Carlos A. *Directory of Academic Library Consortia.* Santa Monica, Calif.: System Development Corp., 1972, pp. 137, 141, 151.
38. In 1972 these university libraries were involved in such cooperative programs as the Center for Research Libraries, the Connecticut College-Trinity-University of Connecticut-Wesleyan contractual arrangement with Yale and the Boston Theological Institute. Rosenthal, Joseph A. *The Research Libraries Group: Proposals for Cooperation Among the Libraries of Columbia, Harvard and Yale Universities and the New York Public Library* [n.p., 1973], pp. 6-7. Such programs, however, do not meet the definition of a consortium which I have set forth earlier.
39. Haas, "Preparation of Detailed Specifications," pp. 432-33.
40. Rosenthal, *The Research Libraries Group,* p. 5.
41. Ibid., pp. 16-17.
42. Ibid., p. 18.
43. Ibid.
44. Ibid., pp. 19-20.
45. Ibid., p. 20.
46. Ibid., pp. 93-94.
47. Ibid., pp. 94-95.
48. Ibid., pp. 95-96.
49. Ibid., p. 92.
50. Ibid.
51. Research Libraries Group. *RLG Preservation Manual.* Stanford, Calif.: RLG, 1983, p. 6.
52. The Research Libraries Group, Inc. "Progress Report" [n.p.], 1979, p. 11.
53. RLG, *RLG Preservation Manual,* p. 7.
54. RLG, "Progress Report," pp. 28-31.
55. Ibid., p. 3.
56. Research Libraries Group. *Preservation: The Research Libraries Group, Inc.* Stanford, Calif.: RLG, 1983, p. 2.
57. RLG, *RLG Preservation Manual,* pp. 8-9.
58. Ibid., pp. 25-41.
59. Welsh, William J. "The Library of Congress: A More-than-Equal-Partner." *Library Resources & Technical Services* 29(Jan./March 1985):90. By Jan. 1985 "several hundred records" had been input into the NUC database. "These records are all full-level AACR2 cataloging." Hendrickson, Norma. "Preservation Microfilming Committee Reports from Sessions of the Midwinter Meeting of the American Library Association." *Library of Congress Information Bulletin* 44(15 July 1985):183-84.
60. RLG, *RLG Preservation Manual,* p. 8.
61. "RLG Preservation Union List Available." *CAN: Conservation Administration News* 19(Oct. 1984):20.
62. Research Libraries Group. "Sharing the Results of Preservation Microfilming." *The Research Libraries Group News* 7/8(May/Sept. 1985):15.
63. "Products and Services." *CAN: Conservation Administration News* 23(Oct. 1985):18.
64. "Library of Congress will Coordinate Preservation Microfilming with RLG." *CAN: Conservation Administration News* 15(Oct. 1983):16.
65. RLG, *RLG Preservation Manual,* pp. 13-23.
66. RLG, *Preservation: The Research Libraries Group,* pp. 5-6.

67. Ibid., p. 4.

68. RLG, *RLG Preservation Manual*, p. 11.

69. Ibid., p. 8. Nancy Gwinn has sketched a plan by which the RLG Cooperative Preservation Microfilming Project might be extended to 20 or 25 institutions: Gwinn, Nancy E. "A Nationwide, Coordinated Preservation Program: Its Time Has Come." In *Academic Libraries: Myths and Realities* (Proceedings of the Third National Conference, Seattle, Wash., 4-7 April 1984), edited by Suzanne C. Dodson and Gary L. Menges, pp. 259-62. Chicago: ACRL, 1984.

70. "News in Brief: British Library and RLG to Cooperate." *American Libraries* 16(Feb. 1985):83.

71. Gwinn, Nancy E. "The Rise and Fall and Rise of Cooperative Projects." *Library Resources & Technical Services* 29(Jan./March 1985):80-86.

72. "Scholars to Advise in Rescue of Classics." *The Abbey Newsletter* 9(April 1985):41.

73. Darling, Pamela W. "Preservation: A National Plan at Last?" *Library Journal* 102(15 Feb. 1977):447-49.

74. Ibid., p. 447.

75. Haas, Warren J. "Summary of the Discussions." In *A National Preservation Program: Proceedings of the Planning Conference*. Washington, D.C.: Library of Congress Preservation Office, 1980, p. 123.

76. Ibid., p. 124.

77. Darling, "Preservation: A National Plan at Last?" p. 447.

78. Gwinn, Nancy E. "CLR and Preservation." *College & Research Libraries* 42(March 1981):104-26.

79. Ibid., p. 119.

80. Darling, Pamela W. "Towards a Nationwide Preservation Program." *Library Journal* 104(May 1979):1012.

81. Walker, Gay. "Preservation Efforts in Larger U.S. Academic Libraries." *College & Research Libraries* 36(Jan. 1975):39-44.

82. Shelley, Karen Lee. "The Future of Conservation in Research Libraries." *Journal of Academic Librarianship* 1(Jan. 1976):15-18.

83. *Planning for Preservation* (SPEC Kit 66). Washington, D.C.: ARL, 1980 (intro. SPEC flyer).

84. Ibid.

85. Ibid.

86. Association of Research Libraries. *Preservation Planning Program: An Assisted Self-Study Manual for Libraries*. Washington, D.C.: ARL, Office of Management Studies, 1982, p. i.

87. Ibid., p. 4.

88. Darling, Pamela W., comp. *Preservation Planning Program Resource Notebook*. Washington, D.C.: ARL, Office of Management Studies, 1982, p. i.

89. Association of Research Libraries. "Libraries Selected to Conduct Preservation Planning Studies." *ARL Newsletter* 124(12 March 1985):6; and _____. "Ten ARL Libraries to Conduct Preservation Planning Demonstration." *ARL Newsletter* 121(1984):3.

90. "Preliminary Responses from the Microform Preservation Survey." *ARL Newsletter* 121(14 Aug. 1984):3.

91. Association of Research Libraries. "Preservation Component of ARL Microform Project Completes Work." *ARL Newsletter* 125(9 May 1985):8.

92. Ibid.

93. Association of Research Libraries. "Preliminary Findings from ARL Microform Project Preservation Survey." *ARL Newsletter* 123(18 Dec. 1984):2.

94. Association of Research Libraries. *Guidelines for Minimum Preservation Efforts in ARL Libraries*. Washington, D.C.: ARL, 1985, p. 1.

95. Ibid., p. 3. The brief *Guidelines* do not indicate how these percentages were arrived at. One can infer that David Weber, who drafted the *Guidelines*, used the figures from his survey of 1981-82 preservation expenditures by 18 libraries: Weber, David C. "Preservation Programs: The Fiscal Support at Stanford and Other North American Libraries." In *The Library Preservation Program: Models, Priorities, Possibilities*, edited by Jan Merrill-Oldham and Merrily Smith, p. 91. Chicago: ALA, 1985.

96. ARL, *Guidelines for Minimum Preservation Efforts*, p. 4.
97. Byrnes, "Preservation of Library Materials," p. 297.
98. Council on Library Resources. *Two Reports on Research Libraries*. Washington, D.C.: CLR, 1983, p. 3.
99. Ibid., p. 28.
100. Council on Library Resources. *Preserving Our Intellectual Heritage: General Directions and Next Steps*. [Washington, D.C.]: CLR, 1984, p. 1.
101. Council on Library Resources. "Exxon Awards Preservation Grant." *CLR Recent Developments* 12(June 1984):3.
102. Council on Library Resources, *Preserving Our Intellectual Heritage*, pp. 2-3.
103. CLR, "Exxon Awards Preservation Grant."
104. CLR, *Preserving Our Intellectual Heritage*, p. 6.
105. Council on Library Resources. "Preservation Advisory Committee Named." *CLR Recent Developments* 12(Oct. 1984):1.
106. CLR, *Preserving Our Intellectual Heritage*, p. 7.
107. Ibid., p. 9.
108. Ibid., p. 12.
109. Ibid., pp. 12-13.
110. Systems and Procedures Exchange Center. "Preservation Education in ARL Libraries." *Spec Flyer* 113(April 1985).
111. CLR, *Preserving Our Intellectual Heritage*, p. 10.
112. CLR, "Preservation Advisory Committee Named," p. 1.
113. "AMIGOS and Preservation." *CAN: Conservation Administration News* 19(Oct. 1984):24.
114. "SOLINET Receives NEH Cooperative Preservation Grant." *The Primary Source* 6(Aug./Nov. 1984):12.
115. Cain, Mark E., and Dean, Barbara. *The Management of Preservation Information*. [Washington, D.C.]: CLR, 1985, pp. 1-5.
116. Ibid., pp. 2-3.
117. Ibid., p. 6. For a related discussion of separate v. integrated records, and of interpreting AACR2 for the cataloging of reproductions, see: Bartley, Linda. "Serials Section, Research Libraries Discussion Group, Reports from Sessions of the Midwinter Meeting of the American Library Association." *Library of Congress Information Bulletin* 44(15 July 1985):181-82.
118. Council on Library Resources, Committee on Preservation and Access. "Interim Report." Washington, D.C.: CLR, 1985, p. 3.
119. Ibid., pp. 6-9.
120. Ibid., p. 4.
121. Ibid., pp. 1-11.
122. Ibid., pp. 11-12.
123. Ibid., p. 13.
124. McCoy, Richard W. "The Electronic Scholar: Essential Tasks for the Scholarly Community." *Library Journal* 110(1 Oct. 1985):39-42.
125. Walker, Gay, et al. "The Yale Survey: A Large-Scale Study of Book Deterioration in the Yale University Library." *College & Research Libraries* 46(March 1985):111-32.
126. Battin, Patricia. "Preservation: The Forgotten Problem." In *Priorities for Academic Libraries*, edited by Thomas J. Galvin and Beverly P. Lynch, p. 65. San Francisco, Calif.: Jossey-Bass, 1982.
127. Committee on Preservation and Access, "Interim Report," p. 3.
128. Walker, et al., "The Yale Survey," p. 125.
129. Child, "Future of Cooperative Preservation Microfilming," pp. 95-96. Preservation microfilming is considered to be the best method at this time. For a current assessment of alternative technologies such as video and optical disks, see: Committee on Preservation and Access, "Interim Report," pp. 4-5.
130. Byrnes, "Preservation of Library Materials," p. 298.
131. Williams, "Preservation of Deteriorating Books, Pt. I," p. 56.
132. Battin, "Preservation: The Forgotten Problem," p. 63.

133. Adams, "Proposed Plan for the Preservation of Cultural and Scientific Resources." Quoted in Tauber, "Conservation Comes of Age," p. 218.

134. Williams, "Preservation of Deteriorating Books, Pt. II," p. 192.

135. Battin, "Preservation: The Forgotten Problem," p. 67.

136. Library of Congress. "Semiannual Report on Developments at the Library of Congress: October 1 Through March 31, 1985." *Library of Congress Information Bulletin* 44(1 July 1985):151-72.

137. Nelson, Dale. "Dateline Washington: Deacidification Priorities." *Wilson Library Bulletin* 59(April 1985):535.

138. Morrow, Carolyn Clark. *The Preservation Challenge: A Guide to Conserving Library Materials*. White Plains, N.Y.: Knowledge Industry Publications, 1983, p. 198.

139. Welsh, William J. "The Preservation Challenge." In *The Library Preservation Program: Models, Priorities, Possibilities*, p. 3.

140. Williams, "Preservation of Deteriorating Books, Pt. II," p. 193.

141. Field, Jeffrey. "The Role of the National Endowment for the Humanities' Office of Preservation in the National Preservation Effort." *Microform Review* 15(Spring 1985):81-86.

142. "Sharing the Results of Preservation Microfilming," p. 15.

143. Association of Research Libraries. "New York State Makes Preservation Grants." *ARL Newsletter* 121(14 Aug. 1984):2. See also: "Funding Doubled for N.Y. Libraries." *The Abbey Newsletter* 9(Sept. 1985):77-79.

144. This paper has rounded off the figure of $247 million discussed by Field on page 84.

145. Holley, Edward G. "What Lies Ahead for Academic Libraries?" In *Academic Libraries by the Year 2000: Essays Honoring Jerrold Orne*, edited by Herbert Poole, p. 21. New York: Bowker, 1977.

VITA

Susan E. Bello is Assistant Acquisitions Librarian at The Libraries, Massachusetts Institute of Technology. She is a 1985 graduate of the M.S.L.S. program in the School of Library Science at the University of North Carolina at Chapel Hill. She received the A.B. in public policy studies from Duke University and the M.A. in history from the University of Virginia.

Ms. Bello has worked in the Library of Congress and in the libraries of the University of Virginia, North Carolina State University, Duke University, and the University of North Carolina at Chapel Hill.

Ms. Bello is a member of Beta Phi Mu, of the Association of College and Research Libraries, of the American Library Association, and of the Renaissance Society of America. Her interests in librarianship include publishing, rare books, and the management of academic libraries.

INDEX

AACR2: 44 ref. 59, 46 ref. 117
Academic libraries: historical development of, 39-40; and economic pressures, 41; mission, 4-5; as national resources, 42; survey, 24-25
Access: priority, 4, 10; and resource development, 10-11; RLG program, 18; to national resource copies, 11; to preservation information, 33-34, 36
Acquisitions, coordinated, 13, 14, 15, 40
Adams, Scott, 6
American Association of Universities (AAU), 28-29, 30-31
American Council of Learned Societies (ACLS), 29, 30-31
American Library Association (ALA), 5; Resources and Technical Services Division, 27; survey of preservation microfilming, 27
American Philological Association, 22
American Theological Library Association, 22
AMIGOS, 33
Association of Research Libraries (ARL), 5, 10, 27, 30, 38; and 1964 report, 7-10; Committee on National Needs, 6; Committee on the Preservation of Research Library Materials, 7-10, 22-23, 27, 28; Five Year Plan, 28; *Guidelines for Minimum Preservation Efforts*, 28, 45 ref. 95; and local preservation programs, 24-28, 36-37; Microform Project, 27; Office of Management Studies (OMS), 25-27, 32; Preservation Planning Program, 26-27; Systems and Procedures Exchange Center (SPEC), 25, 32

BALLOTS, 18
Barrow, William J., 6-7, 37-38
Basic Preservation Procedures, 25
Battin, Patricia, 39
Bibliographic control: of best copies, 8; of microform masters, 7, 17, 19, 20, 34-35; and national libraries, 10, 12, 40
Bibliographic databases, 13, 17, 18, 34
Bibliographic infrastructure, 33-34
Bibliographic searching, 17, 20, 33-34
Binding condition: records, 33
Binding materials, 3, 37-38
Boorstin, Daniel J., 23
Brigham Young University, 18
British Library, 22
Brown University, 20

Cain, Mark E., 33-34
Canadian Association of Research Libraries, 27
Capacity to act, 10, 23, 28, 39
Cataloging of microforms, 19-20, 33-34, 46 ref. 117
Center for Research Libraries (CRL), 7, 44 ref. 38
Central library agency, 7-8, 9, 12, 39-40
Child, Margaret, 31, 38-39
Classics project, 22
Clearinghouse for preservation information, 16, 17, 21, 40
Collection Analysis Project, 25
Collection development, cooperative, 6, 16, 18, 21
Collection maintenance, 22-23
Collections, research: coordinated system, 11-12, 29-30, 31; use, 14
Colorado State University, 26
Columbia University: School of Library Service, 24-25
Columbia University Libraries, 9, 13, 38, 42; Preservation Department, 16, 22, 25-26, 33; and Research Libraries Group, 14, 18, 20
Committee on Preservation and Access, 31, 34-36
Conservation: definition, 42-43 ref. 1
Conservators, 24-25, 30
Consortia: establishment, 12-13
Consortium, preservation, 10-11, 12-13, 17, 30-31, 34
Cooperative microfilming programs, 11, 17, 18
Cooperative Preservation Microfilming Project (of RLG), 19, 20-22, 40, 41, 45 ref. 69
Copies, best: collection, 7-8, 11-12
Cornell University Libraries, 42

Council of National Library Associations, 5
Council on Library Resources, 6, 7, 8, 31, 34, 38; and conservation facilities, 8-9, 32; and national preservation strategy, 29-37; "Preserving Our Intellectual Heritage: General Directions and Next Steps" (1984), 29-32, 39, 40; and steering committee, 23, 29

Darling, Pamela W., 25, 42-43 ref. 1, 43 ref. 2
Dartmouth College, 18, 26
Deacidification, 8-9, 16, 38, 40
Dean, Barbara, 33-34
Deterioration: of library materials, 4, 5, 6, 7; of massive collections, 9, 17, 37-39
Disaster Relief and Preparedness, 25
Dougherty, Richard M., 4

Education for preservation, 16, 24-25, 30, 31-32
Environmental conditions, 16, 28, 38-39
Equipment, preservation, 16, 32, 40
Exxon Education Foundation, 32, 42

Facilities, production, 17, 18-19, 27, 30, 32
Facilities, storage, 14, 23, 32; of RLG, 19, 21, 22
"Farewell to Alexandria," 39
Farmington Plan, 5
Filming process, 17, 18, 19-20, 21
Fox, Lisa, 33
Funding: for cooperative projects, 7, 9, 17, 19, 27, 30, 31, 41-42; for local programs, 25, 28-29

Gore, Daniel, 39
Guidelines for Minimum Preservation Efforts in ARL Libraries, 27-29
Gwinn, Nancy E., 45 ref. 69

Haas, Warren J., 9, 23-24, 28, 29, 36; *Preparation of Detailed Specifications for a National System for the Preservation of Library Materials* (1972), 9-12, 13, 20, 21, 24, 30, 34, 39, 40
Hamlin, Arthur T., 12-13
Harvard University Libraries, 10, 13, 14, 15, 16, 18
Higher education, 29, 41
Human record, 14, 31, 41

Imprints, United States, 11-12, 20-21, 40
Independent Research Libraries Association, 27
Information management system, 33-34
Intellectual content, 19, 42-43 ref. 1
Intellectual heritage, 30, 37
"Interim Report" (1985), 31, 34-36
Interlibrary loan, 12, 17, 22, 35
Iowa State University, 26

The Journal of Academic Librarianship, 24

Koepp, Donald, 32

Librarian of Congress, 8, 23, 40-41
Library of Congress (LC): and bibliographic control, 10, 20, 41; conservation lab, 8; and Cooperative Preservation Microfilming Project, 20-21; deacidification facility, 40-41; estimate of deteriorated volumes, 38; National Preservation Program, 23, 40; Pilot Preservation Project, 8; Preservation Department, 24; role in preservation, 8-9, 23, 30, 40-41
Library Trends, 5, 6
Linked Systems Project, 33, 34

"The Management of Preservation Information," 33-34
MARC format, 15, 19, 20, 34
Mass Book Deacidification Facility, 40
McCoy, Richard W., 36-37
(Andrew W.) Mellon Foundation, 20, 22, 42
Microfilming: cooperative projects, 13, 17, 18, 27, 38; quality control, 18, 21, 27, 32; survey, 27. *See also* Cooperative Preservation Microfilming Project
Microform masters: bibliographic control, 7, 17, 19-22, 34-35; national collection, 11; service copies, 7, 17, 18, 20; storage, 7-8, 18, 21, 22
Microform technology, 5, 7, 19, 46 ref. 129

Microforms, 10; cataloging, 19-20, 33-34, 46 ref. 117; production, 27, 34-35
Mid-Atlantic Preservation Center, 32
Mowat, Ian R.M., 4

National collection, 7-8, 11, 31, 35, 39-40
National Endowment for the Humanities (NEH): funding of microform projects, 20, 22, 41; grant for Yale survey, 38; grant to SOLINET, 33; grants for ARL projects, 25, 26; Office of Preservation, 41
National libraries: role, 10-11, 12, 40
National library corporation, 10-11, 13, 18, 30, 34
National Library of Medicine, 30
"National plan": meaning, 30, 34-35
National preservation program: early plans, 5-6, 7-9; leadership of, 23-24; RLG project as model, 21, 45 ref. 69; organizational structure, 9, 10, 13, 22, 28-29, 30-31, 36-37, 41; strategy, 29-31, 35
National Preservation Program (NPP), 22-23, 40
National Register of Microform Masters (NRMM), 20
National Trust for Historic Preservation, 37
National Union Catalog, 7, 8, 11-12, 20, 44 ref. 59
Networks, library, 6, 12-13. *See also* individual networks by name
New England Document Conservation Center, 32
New England Library Information Network (NELINET), 13
New Serial Titles, 20
New York Historical Society, 32
New York Metropolitan Reference and Research Library Network (METRO), 13
New York Public Library, 13, 14, 15, 18, 38; and filming projects, 20; preservation program, 16; Research Libraries, 42
New York State Library, 42
New York University Libraries, 33, 42
Northwestern University, 26

Ohio College Library Center (OCLC), 13
Ohio State University, 27
Online Computer Library Center (OCLC), 27, 33, 34
Optical image storage, 19, 46 ref. 129

Paper: instability, 4, 6-7, 8, 37-38
Paper condition: records, 33
Pilot Preservation Project, 8
Planning for Preservation, 25
Preparation of Detailed Specifications for a National System for the Preservation of Library Materials by Warren J. Haas (1972), 9-12, 13, 20, 21, 24, 30, 34, 39, 40
Preservation: conferences, 22-23, 28-30; definition, 42-43 ref. 1; goals, 7, 28, 35, 39-40; literature, 26, 31-32; local programs, 23-29, 31-32; magnitude of problem, 4-5, 37-39; media coverage, 4, 43 ref. 2; personnel, 24-26, 30; priority, 4, 9-10, 27; public support, 31-32, 42; research capability, 30, 35-36; selection of items, 11, 23, 39
Preservation Education in ARL Libraries, 32
Preservation Planning Program (of ARL-OMS), 25-26
Preservation Planning Program Manual, 26
Preservation Planning Program Resource Notebook, 26
Preservation, retrospective, 30, 32, 40-41
Preservation, selective, 11, 39
"Preserving Our Intellectual Heritage: General Directions and Next Steps" (1984), 29-32, 39, 40
Princeton University Library, 13, 18, 32
"Program Statement for a Consortium of Research Libraries" (1973), 14-15, 29

Rare materials, 6, 7
Research libraries: role, 14-16, 29-30; and national collection, 7-8, 12, 39
Research Libraries Group (RLG), 15-22; clearinghouse for preservation information, 16, 17, 21; membership, 15, 18, 33, 36-37; microfilming projects, 18, 19, 20-22, 40, 41, 45 ref. 69; objectives, 15, 18,

19, 21; Preservation Committee, 16, 17, 19, 26-27; storage facility, 19, 21, 22
RLG Preservation Manual, 21
RLG Preservation Union List, 20
RLG Progress Report (1979), 18
Research Libraries Information Network (RLIN), 18, 20, 21, 22; preservation enhancements, 19, 21, 33-34
Research Triangle Institute, 7
Resource development, 10-11, 39
Retrospective conversion projects, 18, 19-20, 33
Rosenthal, Joseph A., 15; plan for RLG, 15-17, 19, 20, 21, 24
Rutgers University, 18

Scholars: and preservation planning, 20, 31, 36
Scholarship: and library resources, 9, 32
Shelley, Karen Lee, 24
Smithsonian Institution, 31
Southeastern Library Network (SOLINET), 33
Staff training, 26-27, 32, 33
Stanford University Libraries, 18, 33, 45 ref. 95
State of New York: and preservation grants, 42
State University of New York (SUNY): at Albany, 42; at Binghamton, 42; at Buffalo, 42; at Stony Brook, 27, 42
Storage conditions, 4, 8, 11, 22-23, 24, 38
Survey: of preservation activities, 23-26, 26-27, 28; of preservation expenditures, 45 ref. 95; of Yale collections, 38-39
Syracuse University Libraries, 42

Task Force on Preservation, 29
Tauber, Maurice F., 5, 6
Technical information: about preservation, 25, 26, 40
Technologies, preservation, 19, 46 ref. 129
Training for preservation, 16, 24, 25-26, 30
Treatments, physical, 6, 16, 30, 42-43 ref. 1

United States Congress, 40
United States Office of Education, 9, 12
University of California at Berkeley, 20
University of Florida, 33
University of Iowa, 18
University of Michigan, 18, 20
University of Minnesota, 20
University of Missouri, 26
University of Oregon, 27
University of Pennsylvania, 18
University of Rochester, 42
University of Tennessee, 27
University of Toronto Library Automation System (UTLAS), 34
University of Virginia, 26
University of Washington, 26

Walker, Gay, 24
Washington Libraries Network (WLN), 34
Weber, David C., 45 ref. 95
Williams, Edwin E., 10
Williams, Gordon R., 7, 23; 1964 report, 7-9, 10, 11, 12, 23, 39-40, 41
Wingspread Conference, 29-30
Wye Plantation Conference, 29-30

Yale University Libraries, 13, 16, 24, 33, 44 ref. 38; and RLG, 14, 15, 18, 20; survey of collections, 38

OCCASIONAL PAPERS deal with any aspect of librarianship and consist of papers which are too long or too detailed for publication in a library periodical or which are of specialized or temporary interest. Manuscripts for inclusion in this series are invited and should be sent to: OCCASIONAL PAPERS, Graduate School of Library and Information Science, Publications Office, University of Illinois at Urbana-Champaign, 249 Armory Building, 505 E. Armory Street, Champaign, Illinois 61820.

Papers in this series are issued irregularly, and no more often than monthly. Subscriptions for 1986 may be established for $13.00 per year. At least five papers will be issued annually, beginning with number 173 for 1986. Individual copies of current or back numbers may be ordered each for $3.00 plus $.50 postage and handling. *All orders must be accompanied by payment.* Send orders to: OCCASIONAL PAPERS, Graduate School of Library and Information Science, Publications Office, University of Illinois at Urbana-Champaign, 249 Armory Building, 505 E. Armory Street, Champaign, Illinois 61820. Make checks payable to University of Illinois.

Donald W. Krummel, Editor
James S. Dowling, Managing Editor

PUBLICATIONS COMMITTEE

Leigh Estabrook
Debora Shaw
F. Wilfrid Lancaster